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ggtcgaccca cgcgttcgat ttctccctcc agccagggcc caactcccac ctgcctgggc 120
gaateteete caaggaagte ecaggaggat ggggaccagg aaggetgtgg acceecatet 180
ccagggggcc ttcccagcct gatccctgtc ctccaagttc tggaggaggc cgctgtaggg 240
totggotgag ottoccacco actitocotg gtoccaatco titottgtoc tatacccage 300
tggggttgct gccctgaacg aactgcgtgt ggggccggca catcctagca ggcagcccct 360
ggcgcctgct gcctcaggga tgctccaacc accctcgttc tcctcgcagt ggccctggct 420
cccacccca tggagaaccc aaagtcttac tgtatataac tccaggtgac gtttctatat 480
ttatageang ngttgaaaac ccacgtgttt tacacagaac caccctctcc aacccctccc 540
ttcccgaccc caacaaaacg tttttcaaac cccttacagt tcctggggca ggcggaaaca 600
                                                                   601
а
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<212> DNA
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<222> (398)
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<222> (416)
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<220>
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<222> (423)
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cgccctccgg gctccgttaa nnntccttcc gnggttcacc tacggaaacc ttgttacgac 120
ttttacttcc tctagatagt caagttcgac cgtcttctca gcgctccgcc agggccgtgg 180
gccgaccccg gcggggccga tccgagggcn tcactaaacc atccaatcgg tantagcgac 240
gggcggtgtg tacaaaggnc agggacttaa tcaacgcaag nttatgaccc gcacttactg 300
ggaattcctc gttcatgggg aataattgca atccccgatc cccatcacga atggggttca 360
acgggttacc cgcgcctgcc gcgtanggta ggcacacnct gagccattca atgtangcgc 420
gtncagcccg gacatctaag ggatcaa
                                                                   447
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<211> 186
<212> DNA
<213> Homo sapiens
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cnagetecae egeeggegea agggeaaagg caaaggeaaa ggeggetngg gagattenge 120
cgtgaagcaa gtgnagatag atggccttgt ggtattnaag ataatcnaac attatcaaga 180
                                                                    186
agaagg
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<211> 253
<212> DNA
<213> Homo sapiens
<220>
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<222> (122)
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<221> misc feature
<222> (186)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (246)
<223> n equals a,t,g, or c
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tnatcgtgtc tgtagatgaa ccacaagaac cccgctcnct gtggtgctcc acagagaggc 120
gnggctggtc gtggcgccca ctgagagcac caccataatg tgtgtctggg atacctctgt 180
tgtatnatta aagaggtata tgcatttcta tggcattaaa attagtaaaa aaaaaatggg 240
                                                                   253
ggccgnccat gct
<210> 3607
<211> 309
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<222> (247)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (309)
<223> n equals a,t,g, or c
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cagctgcggc acccctccca gcctacccct cctgcgctgc cccagagcct gggaaggagg 120
ccgctatgca gggtagcact gggnaacagg agacccacct gaggctcagc cctagccctn 180
agcccacctg gggagtttac tacctgggga ccccccttgc ccatgcctnc agcttacaaa 240
acaattncaa ttgcttttt tttttggtcc aaaataaaac ctcagtttag ttttgccaaa 300
                                                                    309
aaaaaaaan
<210> 3608
<211> 477
<212> DNA
<213> Homo sapiens
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<221> misc feature
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<220>
<221> misc feature
<222> (299)
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<221> misc feature
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<222> (473)
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ccctgagtaa ggctcagttt ctgagaatca atggnttccc ccaaccccca gcccagcctc 120
agcccaatat ctctgacctc tggcctgatt cctagaggtg accagaattt aatgtcaggg 180
cctaaatagt cattgagtag attgcattcc tattggtgcc ctcgaagacc tcacttgtgc 240
acctgtggga cccctgccgg ggcagatagg acacgagcta aatgggtgct gggcaagtnc 300
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ctgtggacct gacaagggga cctgagcagt atgggaaggg gntttnggaa agnnagtncc 360
caccntntgn aattnaagng gtggntntnn nttttaggng gtngccaaat ttggtntnag 420
ttnnttnnng aaggnctaaa ggtttttna aatttaaaag ggtttcnngg tgnaaaa
<210> 3609
<211> 284
<212> DNA
<213> Homo sapiens
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<222> (181)
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ccagcatggc cacagagctg gcccatctcc agggggatgg ccaagcctag gtgtgctgga 120
cacteteate teatetttgt caetgttgea ggeteetgtt cagaceetee atggtetgag 180
ncccctggaa ttgattgggg acagatgatg ccagtnttca ttgagcagaa gtactggttt 240
tgaattgtta acataaagac catccctatt tagaaaaaaa aaaa
                                                                   284
<210> 3610
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<212> DNA
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<222> (254)
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<222> (302)
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<222> (313)
<223> n equals a,t,g, or c
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agcagggaag nccccaagca cagggcctga gggggtgatg gaggcagcat ccatggggtg 120
tccctgtgct gaggggtgca gcagggcctg tggacacaaa gaagggggga caagaaggaa 180
cccgtgggct ggcacttcag gggtntggac tgggggtttg catcatagaa agtgnaacct 240
gtgcgtttgt gtgncatgtc tgcgtacaca tggctgtntg tgcgtgcaat gaactgtgcg 300
tncccggcca gtntgcgtgt gcgtgncgtg tgt
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<210> 3611
<211> 280
<212> DNA
<213> Homo sapiens
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<222> (34)
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<222> (90)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (99)
<223> n equals a,t,g, or c
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<222> (249)
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cctccgncgn ggcctgnctc cgccgncggn actnncggna gctttatcgc cagagtccct 120
gaactetngn tttettttta atcccetgea tnggatnace ggngtgeeen ancatgtnag 180
acgnancent agacaccage tacegaaatn accancaagg acttaaaagg agaagaagga 240
agttntggna agaggcagaa aatgggaaga gacgcccttn
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<222> (138)
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<222> (182)
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<221> misc feature
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<222> (493)
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<221> misc feature
<222> (499)
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ggtctgcttc ggaccccggc cagaccccag cgaagcccct ctntgcccct ggacccagcc 120
ctctcgtgtc agggtgtntt gggtggacgc ttctcactcg tgcagacctg gctgcccgtg 180
gncccgctgg ctgcacaggg gaggttgcac aggtcagcag agtggctgca gggccgggnt 240
ctgaaccgca ggcccatggg agacggggag gagatggtct cttccacaac cancttaaca 300
gatggaggcg ctgaggnctc gggttcccct gggggcttgg ggnagaccac aaggttttag 360
ttcaaaattc caqttnccca agtttttaaq gaggttcccc ttgggcggnc aaatnggncc 420
caagtggttt ttagattctt aagggcttgt nttgtcattt tggccattaa gnaaggggcc 480
aaagngctta agnaacttnc
                                                                   500
<210> 3613
<211> 478
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
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<222> (52)
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<221> misc feature
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<222> (317)
<223> n equals a,t,g, or c
<220>
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<222> (325)
<223> n equals a,t,g, or c
<220>
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3175

<221> misc feature

<221> misc feature

<223> n equals a,t,g, or c

<222> (340)

<222> (342)

<220>

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<222> (460)
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<222> (474)
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tctctcggag ttggtggagg ggaaaattgt ttgtgaacga tgctgcctcc cgagccatct 240
gctcaccgag aaacccagga tggtggagtg gaatgaagcc gtgcnnccca tgccagttcc 300
cccggggcag ccctcangtt gctgntggac ccggggtttn tntttgcang tgccttggtt 360
gtgggtnana aggatttgca tcaggagtat ccgtgccctg gaggatttct ncttttggna 420
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gggggggccc cgttccccat ttgnccct
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caatactggt cagctccttc gggacaaggg aagggtacag tggcgtgggc ctgactttcc 180
cgccagtgcc ccactgnaaa gtttcttacg ggcataggcg atgnaggngn catgnatcca 240
gggaaggccg gggtgnattg tggctgnaat ttgaactncg tttgtgcctg gtnaacaatn 300
atngtgacct naatgncagg tccgaggttn tgggtaacgn actggnagtg accggnnann 360
gnttggggnt gnaaagneet tttnegneaa ntttteetnn aaaggggene ttggttttte 420
cccgaaaagn cccntttnn tgncttnttn ttgggnagna ccctncaaat ggnggggca 479
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gttgaattga agngtaagtt ctcgttggaa gtgacngagg gtgcaaaaag tgtattnatt 180
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<212> DNA
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3187

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ttccctggga gggacgtgnn ctgtagtgtg gtgtgtggcg tgccatctga cttcctagtn 180
cacattgccc ggtggtctgg ggtatggggg acaaggactg ggtggtnggg actgtccttg 240
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tncccaaatt tngacagggn gnggtcacan ntgntngnnc tgnanctttt ggagnattng 360
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aggctacaag gtgcagagaa gagagtagca gagttggcct ggactgtggn aggttgtttg 180
gggaaactga ggctggcagg gaggggctgg cagggtggcc atatctaagg cgacanggct 240
gcattggcct agnttgngat ctcctagaga aggccctgga gatgacactt nctggggnct 300
tttnaaatnc agtggaataa tttatggggn ctcctnngat tcccaaggtn ctgtgctggg 360
gncactnngn anttggcanc nntgnacccn tanantgggn ccnnantntt nanangnnat 420
gngggnncgn nngncaatng gttcnanact gnnaatgccc agcnntttgg gagtnttang 480
                                                                   489
gcgaaaatn
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ctctccctna tttctccatt gtcttgactt ctagcaaatt tnctcatgag tgtacatacc 180
actaagttgg ccactcngat tantctggac aaaacgggnt gggactaagt ctgatttatt 240
ntatggcage atttggatta agactaatca acaggtactt ccaagtagca ggtggggttc 300
teagettgne agtgntecte agetgntgtt ettgeagggg teecagetna gaacaaatte 360
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ctagtcctga tggaaaactc agcctgctga atgtccagaa ctctgaccaa tcagtcattc 180
ctcctcttgt ggaagggtgc aaataaggcc atgggaatga aaagctgcat gtgttttgcc 240
cagtgtgggg cttcttacct ctgtgggaga gggggaatag gaaagaattt ctctggggaa 300
                                                                   338
cagganaaaa aaaaaaaagg aagggggggn ggggggag
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cacggtgctt gacacttggg tccctgacgg ggagccagct tacttcggca taaagacctg 180
gggagctaca gatgcttatg tccacaggag ggccccacgg aatcctgtcc cggctggagg 240
ctgttcagaa ggatgctggg ggataagccc ttaggcacca gnttaggaca acttncaaga 300
accagggccc cgttgattgc aagttggcag ttttgataac ccttagagnc cccagnattn 360
cnntttttgg gtncccnttt ttnnagcaaa ccccaaancc ngtttaaaaa ggaaaaanat 420
gggnnaggcc aaggtttaag naaaagtttc cttttggttt ttttnggggc ttcccataac 480
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agecegttet tecnanactn atttecetee ageceetnne attntageca antttetnea 180
ctgnnnntac agttgttatt gnngtcccca actgttgtga attgccnngn ngtttcccct 240
tctgnnaaaa taatgtccat ccttcaaggg ctacctcaga tactgggtaa cttagtnatn 300
nctttgcagc caggagcggt ggttcggctg naantcttaa cacattgggg gncgtagtag 360
ggnngnttgg gtnaggacta ggggttttaa ccagccggng ggttttgggg gatttntttn 420
tanaggggag tnttaacggg aactttttgt tgggccatag tcnnnnnctg gggaattggg 480
gnacggntan nttttgg
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gggaaggent ttgnacagac cenatantan caaggaaacg gactgnaget gacaaggaag 180
ggccatgggn cccttgcccg naaaaggacc ccctgnaggc gggnctgant ggttcctggc 240
ccageggeac tngengggt tacegnttgn ettacegntt ceggeetnee ecenacegtt 300
ccccgangnt tccntttcgg ctggaacaac ggggcncaaa gggaggccaa nttgggggaa 360
agttgcgtnt tgnttcgggn cccangttag ggnttaagtt aacaacttnt ttgnccttca 420
aaaggcangn tttnattccc cngggnaatt nggttntttt cccttnttgt tccaaaacca 480
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cttgggtaaa taacccngag gaaatntgat gagagtaggc ctgtnagata attttaggan 180
gatctnatgg cacagcgtgg aagaaaatca ggtttcccta cagaatcggt cccaaaagaa 240
aacttatttt ggttaaattt ctggntttag gtagngctga tatcaaccct catttgggct 300
gttttatcaa gctttggctn cagcagtntg gactngagtt cgtcacagtt nccgtaccat 360
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catatnnccc nggtgccatn cactgggtgt ttaggctggg ctnntttgtc canggcccaa 480
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atataacatg atttattcat cttaaaaata ttttgttaag agtatctcta acttcattaa 180
taaaataaaa ttagaatgtt tttaatcttn ttcaaccaac ctaattttgt agtattccta 240
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gnaacatett tteagteact eeatggatgt geagetgett ageagttgng gecaaattaa 360
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ctccaaacaa gagcttgaga ggcttgggng gtaaaaagat gtcgtttgtg aacattggga 180
ttaaagaggc actcaagttt agctcctgct tccaagtaag agttgtaaac ttggatttca 240
ntagcactta gaaacacttt ccagnagcca ncttagagtt ncagagtatg cgttgaggac 300
actttaccct tctgggttac aggaaaagnt caggaanttg cctggacatg aaggcagtnn 360
gttgtccaga nccnnttttn aaatncngca agtaaaannt caggtggtag cctcgaactc 420
tctgttgctc tnccaggtag cagttgccaa ttcattctca nagntntttt tggnccctng 480
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acctttnnct gagaggctga tgttggggtc acttcccct gaactaaagt ccaggggctg 180
catgggtgag ggttgagtaa ctcagtactc taaggaggaa aggaagggga atatacactg 240
ttagttaaca gtggttattc ctgtattctc tcttgtttgg attctactgg gggatttctt 300
tctttttttg agtctttatt gacattaggn atgagagata gaaacagggt gagagaggaa 360
gtanaattta aatgtgnatt ctttccacnt nttaccngaa ctcaaccgta tttttgggat 420
cnatanatcc ctacttttcc cctggattta ttnccaaaaa tcttnggggg naccccagnn 480
aatttggnac cctaaantcn ggttaaatta aggccnnggn aaggnggttc cgggggncaa 540
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gcgnangggn cgacttaggt gcaggtgccc tgaatgcagg ttcctatgcg tcactaggta 180
agagaactga ttatggaaaa ttgtaccatg ttctctccct gatctctgtg aagacaagtt 240
catatacctt aatcatttct attcatnctn gtaatttnag gttggtcccc nntggtttaa 300
aaaaaattct tttnttgggg gnacaaaatt tttgggggna ttttg
                                                                   345
<210> 3629
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<212> DNA
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gtgcagagtt gcatctccct ctggcntcct cacatgcttc tgctcagggc ccctgcccag 180
ccctcaattt agagtttctg gtctaattcc tgaccagtga tgtaattatt tatcttcctg 240
ccctnatcct gggggtgcaa acagcaaact tggnatttnt gtttcaggct ttggnaaggt 300
tgggtnccag tttccatctn cngtttagaa gaactgggng gntgcctgct gtggngttng 360
nggnttgngg ttcaagggtt cctgcttctg tgaantgncc aattntttgn ttcaggncca 420
gaacggtgag nagttgggga tttggctnag ggagggtaag ttggngtttc cagaggtnag 480
                                                                   508
ntgngggngg angaanttag atggnagg
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agaaannatg gnnatggtgt taatgttaat ttctcaactt tgtgtttaaa tgtttaccat 180
ttaacaaata tcattaagga aacagnttta aaattggaat ttcctaaaca ttatagtgga 240
tgtttntgaa taatttgcaa acaacaggtc aataggaaat aaaaatggaa tttttnaagt 300
taatgtatta ttttttactt aaatccntta tcnttttgca gttgtcccga ctttattaga 360
caggggnttg tnaataaacc tggggaccnc aggctaggtt tttttnggac cggccatntg 420
ntcngttttt ggttngtttg nggttanggt tagnntnngn naatngttta ngancgtttt 480
angtaggntt ttcccacccc caggtnggt
                                                                   509
<210> 3631
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<212> DNA
<213> Homo sapiens
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3229

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<222> (312)
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (329)
<223> n equals a,t,g, or c
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<222> (348)
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<222> (356)
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<220>
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tattaatgat tacttatgaa aaacaacaac aaaaaagcca tcttgaagct gcttttaatg 180
agagaacaaa tgtgctccca agcaacagag cagcgaaaat ttttttatta ctggnnttct 240
aactttnccc tgntaactnt aactgtcttc angttncacc nnatgtgact tnggggggga 300
tnttttcaac cnngggnttt taanccccnn tttntggngg ggcttttnaa actnantnta 360
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<213> Homo sapiens
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<222> (298)
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<220>
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gagagtgctt tggtgatacc tgggctgtct caagcctgtg tgttcttcaa agattttgtc 180
tttgtaactt gtttatccat ttggtgataa ggtagctaat ggcaattttg tagaattctg 240
tttctctttt cctgtctctt tctttgtttc ctattttcca cagttccgta ggnctcangt 300
atgttctttt ttnccatctt caaagtcttt gnacnctcac acatggcata atggggncan 360
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egggeteegg neacegtnet gteettgaat etgeeegegg eggeeegtgt tgtgttttgt 180
getgtgteca egegetaagg egaceeette eeeegtaetg aetteteeta taagegntte 240
ttttcgcata gtcacgtaac ttcccaccon ancetnttcc tgtgtntnaa gnaattttta 300
ataatctaan aatttanang gnttttttt ntttggncaa aaaataatta aaangttttt 360
ttttnaaaaa aaaaaaaaa aaaatttngg gggggggncc cgnaanccat ttggccctaa 420
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nggggggg
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<212> DNA
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gagcctggag catccggtac ttgccctatg ggagagggga cgctggagga gtggctgcat 180
gtatctgaat aatacagacc ctgtcctttc tcccagtgct gggatttctc catgtgaggg 240
ggcagcagga cacccaggga tctagcgtgg gggaggagag gagcctaatg agaaaatgac 300
cattncaaag cctgcccttc attgggtctg gtttcaagtn ttccaaacca gntttggntg 360
gttagcagag acttcaaggg tgntncagcc aaacgtnttt ggggcattac catgacctgg 420
gngggggaag gtgnacntnn ggacgtttga gggttccagc ntaggnagcc aggggccttg 480
                                                                   497
nacaaaaagg ggggttg
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gctctgctgc tcgtttcccc nacgngaaga agaagtacac ggccaccaag gtcgtctact 180
cenegeeggn tecaceggee enngaageea geetnggeae agttacgaee neaagaetae 240
gtgtnaaggg acagangcaa ggtagaccnc accaccanca ccancagcat naacancatn 300
ancateggnt gnttnttngg gnanneangn teatttennn ggtgnaagtn ttgntnttgg 360
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ttggncaagt ctattttt
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ctgtatcatg tttgctttgt acagctttaa tggaaaaagg aaaggaaaga atacatatga 180
aaagaaggca gtcccttggc actgcctgtt ctcaatgctg tgtgctgtgg actggggaca 240
ctttaattac cacgtacaat tttatggact gttcatgaga agcttctttt taactttttc 300
atggattgcc gttaaaggna aatatagaag gatagaagag gntttttcan cacgttgggc 360
aggaactgtt ccnccctggt ctatgggtta gagcctgnaa actgncccag gttcnatctt 420
ttcagcattt ttcttgngaa ctttctgtgn agggaagttc cnggggccnn taaaaccagg 480
gtggtcngga aggtatc
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<212> DNA
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tcagagttaa agttttcaga atgagagcac gtaccaggag tntcctcagg gttggtttgc 180
tcaggtggaa tggggcagaa ggccacggac tgacgggtga agagacttag gccagggagg 240
ggatgggtca ccccctgaat gctgaagtca tccagggtgg cagcaggagg tgatgcctgg 300
gagagattga ctagtgggtc agtaagggag aaaagaaagg aggggcgttn ntaaccttta 360
gaaggttgtt cccttcggga ggatngnttt tagcacgttg gttcaaaatt tncnncctgn 420
agggaggcaa gatttncatt t
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<212> DNA
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<222> (35)
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cagantgaat aagctactag gacagaagag tactgtatgc aagtggaatg tactgggaat 120
caagattttg naagatgnat gcaattgcct ggagatgaca aatcctaggg ccatgactat 180
gtgnagtagg tggcagaggt gggtggagga agaaatggtc agagctacta ggccnaagag 240
ctaaagggcc agagttnata gagattccac cttcatggaa tgctggaatt tggccaagaa 300
tgnttttcgg acagagagga gaagaggaag aagtaagccc agacattcca agtttatcca 360
ttcatttatt aaccancaaa ttatttacag ncanttacnt ggcnctttna aatttttccc 420
aancaccntt centgttact tteaggngtt tttaccccc ttttaatett nnancetttn 480
                                                                   510
cccnnttcct cntttttaaa gnttgattan
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agtggctctc tctgggccct ggcctggaag accenctgct ttcctggtgg gcaccacgag 180
ggggcaggna cacatggtnc ttccatttca cctctgttgg cctcctcccg gtggtatttn 240
acceptigact cecatgetig aaggiggete tgtaaatgge egagggacee tgancatina 300
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gnggttgaaa gggtncctgg gaaaggttng gaggaatt
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tactttggct tcctttttgt gtgtttttta tagatgttta tagctgtctt catatcttgt 120
tqatatqttq acacttqqaa gggactagag atgtaaqtaa acaatctcaa gcgtagatta 180
tatggcaata tgcagggtcc cactgctagc taggtagtgc tggagcctgt gtgcactctg 240
gctnctaaac antgnncang cttncagctg gcaccacata ctatgnacat gttttctggg 300
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<212> DNA
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aatteggean agageaagat ggtggattae tgettteata gagtgtagae agaeetetea 60
gtagagacaa cggttgantt gggccttgtg gatgagtaaa gcttcatgaa aaacttaata 120
tgttgccctt atttttaca ctttgcagag gactgacgtt attttccata ctggcatgtg 180
ggaagetgte actgacttat gacttgtnea tteattetaa taaagtgaee teacagatgt 240
gtttataaat gcattaaaat ccaggcatgt tttcagagaa agtttttaga atataaatgt 300
tataatgtnn naaccacgnc cttttttcc
                                                                   330
<210> 3643
<211> 400
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (123)
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<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (188)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (274)
<223> n equals a,t,g, or c
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<222> (289)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (333)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (358)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (397)
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<223> n equals a,t,g, or c
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agcctcgtgt gcctttgtaa agtccaccta cacttttgaa ccagctctcg ctgcccgcat 120
gtntttggcg ctgtgctagg ggcgggagtt cttccagact cttggaccag nccgcctga 180
ccaccagntc tacttcccaa cccccactgc ctgagaggtc tctatcagtg tcctgcctga 240
attetteet teaagtgaag atgtgactga etaneteete gagttgttna tgaggntgaa 300
agaatgggna ttaaaagcat ttggtttaaa gtnggtgntc aataaaattg ttagtggntt 360
                                                                   400
ttattcaaaa aaaaaaaaa aaatttgggg ggggggnccg
<210> 3644
<211> 426
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (282)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (319)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (349)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (371)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
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<220>
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<222> (403)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (411)
<223> n equals a,t,g, or c
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aatteggeac gagettttee ageceacaca gecatgteat gatteeatta gteatgatte 60
catgactaat cctcaattgg aaatgcccac cattgatgtt cttcacttag agaaacattc 120
tgatgcacct tttcaaaact gtttttatgt ttcctgttaa gttatgcaat gtctctactt 180
gggaaaaagt ttggaagggg acatttgtaa ccatacttac gtattttttg atgtttctcc 240
attacttttc attcatgtgg gctgggcata taggaaacca antattaaaa caaggtgggc 300
acaagagtgt atgtggggnt gagtaaggaa aatggaaagc cagnaacant ntttattaca 360
caatggcatt ncncattttt ggaaaacagg ctgttgggac ccngccctgt naaaggaagg 420
tttggg
<210> 3645
<211> 318
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (249)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c
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caggatcatg ggtccctcgg agaccccttt ctctgtccct gaggaatatg tgagaaccag 120
acggctcatt ttacgtcctt tgagaagaca gctgcgggga cgtcttagga tgattcactg 180
aggccagtca gtggtgggac caagagctct ggggaacata atttctatca gcctggcgtc 240
ttacttggnc gcccctcca ctccctnacc caccctggc aaccctgtgg tctttntttt 300
gtgttagacc atcagntt
<210> 3646
<211> 298
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (198)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (220)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c
<400> 3646
aattcggcac agcttaatca cccttgctcc tcctgggtgc ctggaagatg gactggcaga 60
gacctgtttg ttgcgttttg tgctttgatg ccaggaatgc cgcctagttt atgtccccgg 120
tgggggcaca cagcggggg cgccaggttt tccttgtccc ccagctgctc tgcccctttt 180
```

3256

ccccttcttc cctgactnca ggcctgaacc ngtcccgtgn ctgtnaataa atctttgtga 240 aattaaaaaa aaaaaaaaa aaaactcggg ggggggcccg gtaccaantt gggccctt 298

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<210> 3647
<211> 579
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (130)

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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (170)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (213)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c
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<222> (319)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (415)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (446)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (521)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (522)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (543)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (556)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (569)
<223> n equals a,t,g, or c
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3259

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<400> 3647
nncncccaca ctntacaccg cagcctgccg gcaccggtccg gcattcccgg ngtcttacgt 60
gccaccacgg cgttgtacct gtaggactct cattcggnat gattggnata gcttctggna 120
tttgttcaan tnttgggtat gtntaanctg tnatgtacta gtgttctgtn tgtcattgtn 180
ttgtnaatta caccataatg ctaatttaan ganactccaa atctcaatga agccagctca 240
cagtgctgtg tgccccggtc acctagcaag ctgccgaacc aaaaganttt gcaccccgct 300
gegggeecae gtggttggng eeetgeeetg geaggteatn etgtgetegg aggeeatete 360
gggcacaggc ccaacccggc cccaaccctc cagaacaggg ctcacgttac tcaancatcc 420
tggctgcngg tctgtctgaa acagcngggg cttgaggacg tttgtctgtc gtgatgggca 480
aggcaaaagt ctggatgttg tgtgtatcga gaggccaaag nntgtggcaa tgcaagggga 540
                                                                   579
aanccgattt gtcctngtga agcggcaant ctgaaggtt
<210> 3648
<211> 191
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (170)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (176)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (189)
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<223> n equals a,t,g, or c

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<400> 3648
gcacaactgc tnagtagatg nttctgagta ttacaaaaat cactggttat tacctgcagg 60
atattaaaaa acatttgaaa aagagaaaaa gaactatcag cgtttagaaa tgatgataga 120
tattgaatct ttgaattgaa ttttaacaat ncattctagt aatcagagtn tacttnttnt 180
                                                                   191
atacaacang g
<210> 3649
<211> 465
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (386)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (411)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (436)
<223> n equals a,t,g, or c
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acacactctg ctattttttc acttcttgga ggtagaagtc gagtatgagg cagttatttt 120
ttagagtgtg gaattatagt ctttccttgc tcctagttat tctgtatatc tttactttgt 180
aggtaaaaat aaatgtttat ttaaaacaat ttttaaaatt ataaatttat ttttatagcc 240
atatgtagga tataaagatt tatatagatt atatactcaa gctacttaat gcnttaattc 300
tagctactca ncnngaaata gtaaacagtt ttacggaaat aaactctaca gacagatgcc 360
gtangaggag centggaagt agaaangtat tegeettgea caeggagtgg ntttageega 420
                                                                   465
caaccccagt angttnccat aacggccata ccttggaaat ccacc
<210> 3650
<211> 316
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (85)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (157)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (161)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (175)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (242)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (248)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (277)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (302)
<223> n equals a,t,g, or c
<400> 3650
ggcacgaggc gaggcctcac anccggcgct ccaagttcgg ggctggaggc gtcccggctt 60
cctccctccc ggagacggga ccggncccgg ccccgcgccc cgggtcgctc ccggcggccc 120
ctanccacct netgagtect ggeeteeeg ggegeanaca nteceageeg geegnageet 180
ggacacgccg ngggcccccc agtctcccgc ggctgctccc ccaggcatgg cacaggggcc 240
tngtctgnac tatgggcagc agcacgggga caagnanggt tcgtatttga tgcttggggg 300
                                                                   316
gncaaaagtt gatggt
<210> 3651
<211> 191
<212> DNA
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<213> Homo sapiens
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<400> 3651
gagaaaggac actctggact tcagccaaca ggactcttga gctgaagtgc agatgaccac 60
attcaaggaa gaacettetg ecceagetnt geaagatgaa aagetnteee aettggetet 120
tatacttcca caagagcttn gncaggacca ggttgntact ggntcagcaa ctctgcagaa 180
aatgtcctcc c
                                                                   191
<210> 3652
<211> 426
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (306)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (320)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (321)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (323)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (357)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (418)
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<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (424)
<223> n equals a,t,g, or c
<400> 3652
ggccagtaca gtatttttta aggcttntaa agatgattag ctcaccttga gataacaatc 60
aggtaagatc ataacaatgt ctcatgatgt aaaaaatatt aaagatatca atactaagtg 120
acagtatcac totaatataa tatggatcag agcatttatt ttgggggagga aaacagtggt 180
gattaccggc attttattaa acttaaaact ttgtagaaag caaacaaaat tgttcttggg 240
agaaaatcaa cttttagatt aaaaaaattt taagtatcta ggagtattta aatccttttc 300
ccatanataa aagtacagtn ntnttggtgg cagaatgaaa atcatgcaac ttctagnata 360
tagactatat aatcagattg acagnatata gaatacattt atcagactag aagatgangn 420
ttanaa
                                                                   426
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<210> 3653
<211> 710
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (154)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (194)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (209)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (212)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (213)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (223)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (236)
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<221> misc feature
<222> (249)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (274)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (277)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (281)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (284)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (295)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (310)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (324)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (325)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (329)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (336)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (352)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (362)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (379)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (395)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (396)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (401)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (414)
<223> n equals a,t,g, or c
<220>
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agcagaggct gcagcctaac gngtggattt aatgaccagc acgcaaggca caaagcattt 120
tgcacagtgn ttgttttcct gtnttgnact tacnantaag gnctatggga gtaccatgna 180
aaacgtttgc tgtnantcct tnttttntna anngttttng ntnaaaattt gatcgnctta 240
actactgcna acatagccta tttttgggct taanaanctg natnggaaac tntcnncgtg 300
cagatgctgn actgttctag aagnntttng ntaaangggc tnctaatttg antgtaatgg 360
cntttaaagn atacaatcna acnttaaaaa gntgnnaaaa nggncttgga accntatctt 420
tagttacttg aagagtttct agttttttta aaatacagnt tatgttaaaa taatttttat 480
taatttagan aagacaatna atggctgtga gaaaaacgga tttcttttgg aatttcnttt 540
tgnggccatt gtnaangaat ngtttttcnt ttntaancga caattttcct ttggttaaaa 600
cttaaantgg acatttaant tttggcaatc taagaggtta atttctgagg gggaanactt 660
ataagengtt aagtttgeet ntgggggntg ggaaatttta aactggggen
<210> 3654
<211> 634
<212> DNA
<213> Homo sapiens
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<222> (135)
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<220>
<221> misc feature
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<222> (592)
<223> n equals a,t,g, or c
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tcagattatt tgaagagaaa cctcatcata tcccacaacg ggaacaggaa aaaaaaaaca 120
cacaatacat tttanagaag tggcaagaca aaggaaagca ggtttaggct cccaaaggag 180
ggacctctga gaagttacct ccacgaagca nctcggctgg tgccagagag aacatcggta 240
caggictggg aatticcctg ggagctggcc ccaagccaca gccctcccca gctccgtagt 300
ttgnttggtc ttcctctct gggctcaatc atcttggaca agcctcactg canggaaaac 360
ccctggggag acacagggct tgctttccca gcagaaggtc agtgtctgaa gagaaactgg 420
```

3273

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gggtccccca gggaccagat tcggctccgg tggtaaggtg ccccaggtgg cccaatagga 480
gaggttatct tctgggagct cttccaggag gagtccacag tgcttggccc aagnttctnt 540
cttgaagaat ccaagcataa ggagcctttg tttggganca naggagccct gngccttctt 600
gagtcaccca ccagctcnag tgccctggac ctgg
<210> 3655
<211> 507
<212> DNA
<213> Homo sapiens
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<222> (14)
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<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (81)
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<222> (287)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (289)
<223> n equals a,t,g, or c
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<221> misc feature
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<222> (360)
<223> n equals a,t,g, or c
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<220>

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<221> misc feature
<222> (470)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (478)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (485)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (505)
<223> n equals a,t,g, or c
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gtgtggttta ctccatgcag ntgtcaggag acctctgtat ggcttttcaa ttttagttga 120
aattetetet ecatggeett ttggagteee ttgetgtate teegaagtaa attteaatta 180
ctctacattt catcaatgtt ggagtggcaa gaaaaaggag gaacagattt ggggtgaaaa 240
gttttgtttt ctaggtctaa caaactgtaa aatgttnaaa atagcanana tgggtgaaaa 300
aaaaaccaga gccctttgga ctttcgcgaa aganttttca aggattacct gcttcagcan 360
accocatent gtgacettga tttetggate aagttatgtg ggggacaaac gaageacagg 420
ctcttcaggg atgctggaac agatggtgga tcaaaatgga cttnatcacn catctgtnga 480
agttnccttg gattgaaaaa ctcanga
                                                                   507
<210> 3656
<211> 433
<212> DNA
<213> Homo sapiens
<220>
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<222> (9)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (393)
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<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (430)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (433)
<223> n equals a,t,g, or c
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tgcctaaaca atgccttaac cccattctct ccccagaagg gtcctacatt tcttaagcta 120
ttttcagctc ctccacacct actcacttgc aatacttgtc ataacaggaa gccagtttca 180
tatactgtaa tccccaaaca cattgcaccc acacgtgggg agcgtgaggg gctgagcgag 240
gagcgaggag gccaggcctt ccaaaaactg gaggggctga gcactgagcc gctcccaagg 300
tggggcgtcc ccactcccaa gcccaggatt cagaagccag aatccacatc cagacattct 360
tggtttcctt tctcatgcag ttgctggtga ctntttttt tttaataaag catttgagta 420
                                                                   433
ggcaaaanan ann
<210> 3657
<211> 378
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (261)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (288)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (338)
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<222> (339)
<223> n equals a,t,g, or c
<220>
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<222> (365)
<223> n equals a,t,g, or c
<220>
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<222> (378)
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ctgttttggt gtgtatgtgt gtgccaccta cccatgcttg tctctgcgcc ccggcgcacc 120
tggcggggtc ccggcaggaa gtgcagcggc ggctgggtgg ctggaccgga ccagagctca 180
gtgcttttgg ggaactggtg ttggagggcg cgttccgagg aggcggaggg ggtggccccc 240
ggctacgagg gggtgagcgg ntgctcttcc tgttctctcg gatgctgntg gtggccaagc 300
gcagggggct ggagtacacc tacaaaggcc acatcttnnt gagtttgggg atggggtggg 360
                                                                   378
gctanaatac tacctacn
<210> 3658
<211> 282
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (26)
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<221> misc feature
<222> (62)
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<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
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<222> (98)
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<222> (150)
<223> n equals a,t,g, or c
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<221> misc feature
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<221> misc feature
<222> (278)
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<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (282)
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angaaaccca taatgtnagg atacttgatt tttatatnca gataattctt tcatgcactg 120
aatggaagac agtatatctg tatattaatn tttgttnaga ttatgaatca tttaaccctt 180
atcetttatt ettgtaataa gaetatttaa tggggttete ttgtgatnte eatetttate 240
                                                                   282
aatgcattcg tgttggtctt gatgtatact acctgngntn an
<210> 3659
<211> 242
<212> DNA
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<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (232)
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<222> (236)
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<222> (237)
<223> n equals a,t,g, or c
<220>
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<222> (239)
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gggagctctg ggggttggaa caggaatgca tattcaggcg agaggcattc tgagctggcc 60
ttagcttaat tacttcattt gatttttaat atagacataa aaatgcagat gaaccagagc 120
ttttgtaatg aaaatcattt ccgaaggaat atttcagacc ccactccgtc acctccagcc 180
tgcagaatgc gtccagaaat aaattctgtg tctgtgtgaa aaaaaanaaa anctannang 240
at
                                                                   242
<210> 3660
<211> 479
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (364)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (366)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (452)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (464)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (465)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (467)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (479)
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ttaatttata gcaaccattt gttacctaat cacagtaaca caacaaaata attagtgtat 120
cancittigaa gateteatti cacaaaaget aaaaaacaeg tiatgatata tecattaete 180
aaactcataa gcccttttgc atgcattggg catagatttc atggaaaatc aaaagcattt 240
agtctacttt ctgacatttt catctgntct ttgaactacc ttaataaaaa aaaattgttg 300
cccttatgta gggtcaagtg acgtttgtct gtctgaaaat ttccttggat cagcttattt 360
ctgngnaact tatgtctttg gtatacagct atttgccttt ttaactgatt tttaacagga 420
tactttacct tgggacttgg aacacttaat gnaagcttat aaanneneat gaaccattn 479
<210> 3661
<211> 491
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
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<221> misc feature
<222> (11)
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<221> misc feature
<222> (19)
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<222> (47)
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<223> n equals a,t,g, or c
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<222> (144)
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<222> (314)
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<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (444)
<223> n equals a,t,g, or c
<220>
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<222> (465)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (468)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c
<400> 3661
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ctctgcaatg tcattctgtg gatcatgcct gccttcgggg cccgccctca tttcagcaac 120
acagtggagg tggatttcta cggntactcc ctctgggcgg tcatcagtna acatctgcct 180
ccctttcggc atcttctacc gcatgcacgc tgtgtccagc ctgctggagg tctacgtgct 240
gtcctgaggc ctccaacaga ggcatggggg gcaggaagag ggggctcagc tcatgtgccc 300
actcagacac cctntgggaa tgaatcccan ctggtgccat atgacagccc atttccttct 360
ggtcccaaan tggaattttc acaaaagtta tttttccagg ttcaattttt aaatcacagt 420
caggacange ccatteacce cagnattaac gtggggcatt aaggngannt ggggaaaggg 480
agaccttttc t
                                                                   491
<210> 3662
<211> 64
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
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<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
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ggactagttc tagatcgcga gcggacgntc gngatntgga aatattttga gnncgtgtct 60
<210> 3663
<211> 100
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (16)
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<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<400> 3663
attatgggct aggggnnctg ggggaccggg tgcaggggcc cttagctcgt ntctcgantc 60
                                                                    100
cgcccgaata tnaatttgga acatgttgtt gagttacctt
<210> 3664
<211> 445
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<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (396)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (419)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (434)
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<220>
<221> misc feature
<222> (444)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (445)
<223> n equals a,t,g, or c
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acagcagcag atccatggtc tcatcagtgt ccttgtagct ttgtgcagca gttccgggct 120
ggaagacaga tacagctgga cagagctcct gaaaacattt caaaataccc cctcccctg 180
ccctgccctg cctttggggt ccaccggcac tccagttgga tggcacaaca tagtgtatcc 240
gtgcagaagc cgagctggca ttttcaccag tgtanccaag ggcctttgcc aagggcagag 300
caggtggagc cctctgcctg ccctatcaca catacgggta cttgcttttc actgtgatgt 360
ttaagagaat gtatgaacag tttacatttt ccttanaaat acattgatgg gatcacagnt 420
ggctttaaaa ccancaacaa tctnn
<210> 3665
<211> 387
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
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 <221> misc feature
 <222> (7)
 <223> n equals a,t,g, or c
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 <221> misc feature
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 <222> (21)
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 <222> (297)
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 <222> (364)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (365)
 <223> n equals a,t,g, or c
 <400> 3665
 gncactngaa cacatgnggc ncanceggcc egectegaag tgeetgggca eteggaaaac 60
 tgttacctca gggactctat ttaaatgctt gctttttctg cagcaccgct tggggaaatc 120
 ctgtcaggat gaaaaggaaa gttggagatt ttttaaatcc ctcttcgctt tgctttattt 180
```

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tcaagtaccc aaacttggtt tattcttttt ttcctttaat cttgaaggct tacccttggg 240
gggaattggt tggggccaag ccaaggcccc ccttggaact tccccaagaa aaatggnctt 300
gaaaggggtc cccttctttc ccaagggggg aagtttcccc ttggggggaa gccaaggaan 360
ttnnnaaagg gggccttatt ttccccc
<210> 3666
<211> 138
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
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<222> (62)
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<222> (111)
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<222> (120)
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<221> misc feature
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<223> n equals a,t,g, or c
<400> 3666
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agtacnngga agtangggca ctcggtggaa aagattggac atagttgcac tcacantcat 60 tnacattttg accatgttgt gctcaacaag agtacagatc acaacgagac nctgcggaan 120 tctcncagac taccgtta 138 <210> 3667 <211> 577 <212> DNA <213> Homo sanjens
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<213> Homo sapiens

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<220>
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<222> (8)
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<220>
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<222> (8)
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- <222> (302)
- <223> n equals a,t,g, or c
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- <222> (516)
- <223> n equals a,t,g, or c
- <220>
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- <222> (540)
- <223> n equals a,t,g, or c
- <220>
- <221> misc feature
- <222> (557)
- <223> n equals a,t,g, or c
- <220>
- <221> misc feature
- <222> (561)
- <223> n equals a,t,g, or c
- <220>
- <221> misc feature

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cgtatccttc tggattcttg tctgaacatt gcttatctgc gtacatatca cagtgttttc 120
acataqqqat tgctgtatgt tgaagtagtt gaggtgtaat agccatataa tctaatgtga 180
tccatctgaa taggcaaacc cttgcacacc tgtgtacctg ttgaacattt tcatcatttg 240
cagttttttc ttaacataag cactgttctg aatacttgtg aacaagtcac ttgggagttt 300
gntcatgggc gtgtatcttc caaagaggag tcttcacgtt caagctgggt aacacactat 360
cagctgtagc cctttcattt taaaaacatt tccagtgctg caaattacta tggtgattgg 420
gaattcaact nggaaatatt tttatttttt aaaaagatag tacattcata tgaatcaaaa 480
taaaatcctt aaaaaggtct atgaaaagtc ttgctnccgg ccctacccac tattctgcgn 540
aagtccaccg gttcctnaca ngaanttaaa tttttag
<210> 3668
<211> 102
<212> DNA
<213> Homo sapiens
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<222> (27)
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<222> (36)
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gctctagang atccaagctt acgtacnatt gtgtgntact ggtatatatg gttctatatg 60
                                                                   102
cgtacattaa attnatatta tntggccagt aagatttaca aa
<210> 3669
<211> 346
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<213> Homo sapiens
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<221> misc feature
<222> (13)
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<222> (278)
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atgtagctga agagtttaca caaaaataaa taagtcaagg gatgtgaatg tagtcgttat 120
gtgctgtggg agccaccctc ggttggctgc gtaggcaggg tgaactggta gcagtgtgga 180
qqtaaggagg tgaggcctgg aatggagaag gggggtgtca gtgagatcag tggaggctgc 240
agaggtccag caatgctgaa ggtctgaaat gaggcagnga tgggttgaag atnagangcn 300
                                                                   346
natattaaac ttttatgagg tagaataggc aaatgttgat ggctta
<210> 3670
<211> 131
<212> DNA
<213> Homo sapiens
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<222> (115)
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<222> (131)
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<400> 3670
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canggnttaa antnttagna agaactggga taataaaaac agttacggag ccactttatg 60
aagtgaagag aaatatgata acctagaggc ccaatgaggt natnttccag aangntgagt 120
tatatttaaa n
<210> 3671
<211> 74
<212> DNA
<213> Homo sapiens
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<222> (7)
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<222> (40)
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<222> (45)
<223> n equals a,t,g, or c
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<222> (52)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<400> 3671
gagtgantat tggattctct ttggtatgtc aataaaagtn tatangtatg tnanaacgga 60
tttgaggaaa aaaa
<210> 3672
<211> 104
<212> DNA
<213> Homo sapiens
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<222> (25)
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<220>
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<222> (27)
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<223> n equals a,t,g, or c
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<222> (84)
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<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
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<222> (91)
<223> n equals a,t,g, or c
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taccaggagg acgtaatgat taatnancct atcccaatgc cttgtgacta ctctacgatg 60
actgactatg cactgctgat gcantgngct nattcactat gggg
<210> 3673
<211> 490
<212> DNA
<213> Homo sapiens
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<222> (352)
<223> n equals a,t,g, or c
<220>
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<222> (417)
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<220>
<221> misc feature
<222> (427)
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<220>
<221> misc feature
<222> (442)
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<220>
<221> misc feature
<222> (473)
<223> n equals a,t,g, or c
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<222> (476)
<223> n equals a,t,g, or c
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gctatctttc caacttccta aatcatcacc ttcatttgat cttgtttttt tccactatca 120
cttctttatt gaccatataa agaatataag tgagttctta ttttgttatt gttcatttta 180
gtctaatttc atcaaaatat cacaatcttt taatttcatt ttaatttcaa agattaaatg 240
aaacctacat agaaatgtgt gtaagatttg catttgcatt attttggcat caatttgcta 300
tectecetea tgeacacaga aateatttee accgtatgtg attteaaaca tneaagtgea 360
gattaaaagc agttgtaaat tatggttete atttteatga tacaattata atataanett 420
ctcttgntgc tgtaaccaat tnccaccaac ttcatatctt accataaagt gancgntaat 480
cctaaaaaaa
                                                                   490
<210> 3674
<211> 53
<212> DNA
<213> Homo sapiens
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<222> (27)
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<222> (30)
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<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<400> 3674
                                                                   53
ggcgagcggt tttgccttta tttttanttn tcctctttnt ctggccanat cnt
<210> 3675
<211> 63
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<212> DNA
<213> Homo sapiens
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<221> misc feature
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<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
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<222> (47)
<223> n equals a,t,g, or c
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gntttgtaga gaacatatat gcataaacat agggcaatta ttnttcnaat ggagacatat 60
<210> 3676
<211> 456
<212> DNA
<213> Homo sapiens
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<222> (3)
<223> n equals a,t,g, or c
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<222> (5)
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<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (417)
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<222> (455)
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<221> misc feature
<222> (456)
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attittgcag ccagatgtgg gctgacagcc atcactcagg gcttccttcc cccgccgtta 120
ggaggtctgg aagacagtca cgttccccat tttgcagaat ccccatcaac attattgaag 180
atggatgtat ctttaaagca aagattgatt gtggatatcg gagttatggn gtcatttatc 240
atggtgaata ttatttagac ttgggttgta caaggctgta acttgagaca cagccagggg 300
agggacaacc tgaaaacgcg gatccatgaa ttttaatgga tggatgcttt tttcaaagct 360
caactcacta tagcgtgatt tacttttctt actgcaagga aacaagcnat ttcaagnctt 420
                                                                   456
aaagagacag catgccantg gtcctgtctg ggggnn
<210> 3677
<211> 291
<212> DNA
<213> Homo sapiens
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<222> (179)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (188)
<223> n equals a,t,g, or c
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<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (228)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (231)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (285)
<223> n equals a,t,g, or c
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attattctcc tctttgatgt aataaagtca gctattagat atgagaaaac catttcagaa 120
gcctggatta aggcaattga aaacactgcc tcagtatctg aacacaaggt ctgcattgnc 180
ttcattgnta tctttaatga ctgtattctg gtctaataac tcagttnngg ngtcctaaga 240
agtggagcat tcagttaaga taagtagtaa aattttttn gttnttctt g
<210> 3678
<211> 231
<212> DNA
<213> Homo sapiens .
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<221> misc feature
<222> (152)
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<222> (191)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
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<222> (214)
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ggagaaaatg atatttaagc caagaactct tagaagttag ctaagaaaga gatgggaaaa 60
tgagacgaca ttgctggagt ngataaaact gcatgtnaaa ggcaggaaga tggggaaaaa 120
aagttcagta aagctggaat ggggaaatgt antccgggac tgaatnttaa agggctttat 180
caacctcagt naagantttg gaccttatgt tganggtggc tgataacata t
<210> 3679
<211> 387
<212> DNA
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<221> misc feature
<222> (169)
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<221> misc feature
<222> (199)
<223> n equals a,t,g, or c
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<222> (200)
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 <222> (220)
 <223> n equals a,t,g, or c
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 <222> (228)
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 <223> n equals a,t,g, or c
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 <222> (236)
 <223> n equals a,t,g, or c
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 <222> (248)
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 <222> (311)
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 <222> (343)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (348)
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 <400> 3679
 ggtcattttg aatctacatg aatgaacact ttggattttg ttgtagtttg attctagggt 60
 agaaccagtc catgctgttt ttatttttta tctccgaatt gtagaatatg ttactaacgt 120
 ttccagtgct agactggcct cgaggctgcc ggttgagnag cagattttng gtatgaatgt 180
 gaactaaacc aggcttccnn ataatagnct aggcaaaatn ctaaaaanta nttagnaaca 240
```

```
gttgtganag tataataagt gagaaagttt tgaaataata ttagaagtga aaaggaggaa 300
aatgtatgtg naggagcagc taatcaagag gtggcttttt tancacgntg actgaagata 360
cgtgtatgga tgactaaaac caaggga
                                                                   387
<210> 3680
<211> 109
<212> DNA
<213> Homo sapiens
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<222> (64)
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<222> (85)
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<222> (89)
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<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
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<222> (105)
<223> n equals a,t,g, or c
<400> 3680
gctcgtgccg aattcggcac gagggaagtg aagccccagc gagcggctgc aacggggccc 60
                                                                   109
tgangaacaa ccaacgggaa gcggnggcna atcngtgaac aactnggaa
<210> 3681
<211> 384
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (258)
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<221> misc feature
<222> (349)
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (367)
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ggggaaactc ggagtacctg cagctggcct ctgtcactga ctccacacag gtgaatgtgc 60
cccgctgctt acacttctca ggagtgggga aggtgcgaca ggctgcatgc ggtggcacgg 120
gctgtgcagt gttaaacgga naaggacatg tttttgtctg gggctatgga attcttggga 180
aaggtccaaa cctagtggaa agtgccgtcc ctgaaatgat accacccact ctctttggct 240
tgacggagtt caacccanaa atccaggttt cccgcatccg atgtggactc agccactttg 300
ctgcactgac caacaaagga gagctgtttg tatggggcaa gaacattcnn anggtgcctg 360
                                                                   384
ggaatnngtt cgccttgaag gacc
<210> 3682
<211> 481
<212> DNA
<213> Homo sapiens
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<222> (305)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (416)
<223> n equals a,t,g, or c
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3300

<220>

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<223> n equals a,t,g, or c
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<221> misc feature
<222> (424)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (449)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (468)
<223> n equals a,t,g, or c
<400> 3682
cggaaagcgg ctccgagcca ggggctattg caaagccagg gtgcgctacc ggacggagag 60
gggagagccc tgagcagagt gagcaacatc gcagccaagg cggaggccga agaggggcgc 120
caggcaccaa tetecgegtt geeteageee eggaggegee ecagageget tettgteeca 180
gcagagccac tctgcctgcg cctgcctctc agtgtctcca actttgcgct ggaagaaaaa 240
cttcccgcgc gccggcagaa ctgcagcgcc tcctcttagt gactccggga gcttcggctg 300
tagcnggctc tgcgcgccct tccaacgaat aatagaaatt gttaatttta acaatccaga 360
gcaggccaac gaggctttgc tctcccgacc cgaactaaag ctccctcgct ccgtgngctg 420
ntangagegg tgtctcctgg ggctccaang cagegagetg tgcccgangg gttcggaagg 480
<210> 3683
<211> 309
<212> DNA
<213> Homo sapiens
<220>
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<222> (6)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (13)
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<222> (108)
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<222> (149)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (272)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (278)
<223> n equals a,t,g, or c
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<222> (302)
<223> n equals a,t,g, or c
<400> 3683
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tccqgtaatt cgcggccgca tcaaccgaac cggtgcgccg caaactangg cgcctcgggc 120
cagggaacgc ggtaagtaac catggccanc gctaacgggg cccgtggtaa aacnggcncc 180
cggacaggga atccgccggn cctgccgcnc cccatcctca acctggaggt caagttcacc 240
aanatattta tcatcaatgg aatngcacgt antccaanat tgggaaaaaa gtttgctaca 300
                                                                   309
tntaaccct
<210> 3684
<211> 440
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (161)
<223> n equals a,t,g, or c
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<222> (240)
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<222> (277)
<223> n equals a,t,g, or c
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<222> (315)
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<220>
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<222> (327)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (335)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (410)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (413)
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<220>
<221> misc feature
<222> (414)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (424)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c
<400> 3684
gataaggttc atgctttaac cagatccgga acatagacct gatatatttc aagtgtcata 60
ttttgcattt aaatttgcca aaaaggattg tccagtctcc aacatcaata attcttctat 120
teetteaget etteetgaac egatgaetge tagtgaagea netgetagga aaageeaaat 180
aaaagccaga ataacagata ccattggacc aacagaaacc tcaattgcac caagacaaan 240
accaaaggcc aactctgcta ctactgccac tcccagngtg ctgaccattc aaagttcagc 300
aacacctgtt aaagneettg eteetgntga attengtaac catagaccaa aaggggcact 360
aagacctgga aatggccctg aaattttatt gggtcaggga cctcctcagn agnncgcaca 420
                                                                    440
gcancataga gnactccagc
<210> 3685
<211> 166
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<400> 3685
nggggccgcg ctttccctcg tgaaggtcgc tncangagtc atgcgtacat ncgctcattt 60
tgctntggac gcactgatgt tcccggctcg tcgccgtgcc gcaatcacna ggctctncga 120
                                                                   166
acgcctttca ctgtgtatct gntatacatt cncatntgca aaaccc
<210> 3686
<211> 649
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<220> .
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3305

<221> misc feature

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<222> (320)
<223> n equals a,t,g, or c
<220>
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<222> (323)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (449)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (543)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (572)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (603)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (608)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (616)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (625)
<223> n equals a,t,g, or c
<400> 3686
cateceeegg getgeaggaa tteattgaeg aegacaagtt aaegtngaet eaagatgget 60
gtcttcgcct tagtactcgt gtgaagttgg cggngacggt tcctgtcatc ttcttgggct 120
tatttggtgt gctgttgaag gggggagact agagaaatgg cagggaacct cttatccggc 180
gcaggtaggc gcctgtggga ctgggtgcct ctggcgtgca gaagcttctc tcttggtgtg 240
cctagattga tcggtataag gctcactctc ccgccccca aagtggttga tcgttggaac 300
gagaaaaggg ccatgttcgn agngtatgac aacatcggga tcctgggaaa ctttgaaaag 360
```

3306

```
caccccaaag aactgatcag ggggcccata tggcttcgag gttggaaagg gaatgaattg 420
caacqqtqta tcccaaaqaq gaaaatqqnt ggaaaqtaqa atqqtcqctq atqacctqac 480
aaccttaata aacgcatccc ctatctctac caacctttaa ccgacatggg aggttcgata 540
ganagaaagt gagactttga aaggtcattg cncctgagaa ggaactgctt tcctggagga 600
cgnttgantt tctganaaaa ggctnttgaa aaaaaaaaa ggctaacgg
<210> 3687
<211> 310
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (172)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (277)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (305)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (310)
<223> n equals a,t,g, or c
<400> 3687
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ttaccataat tcttgtcttt tcagggttgt cctgttcagc tgcataaaac atcatgtatt 120
ctaggtattt cctaccttca cttacattat tacttgccga tgtgctgcct tnataaatgg 180
gtatattccg ccacacatct agtaagcccc caatgcagta cacaatgtgt atcactgata 240
aaactcgcac ttctgccatg tcagtattat attcagnttn agtggtcttt agcatantgg 300
cagtnctagn
                                                                   310
<210> 3688
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<211> 468

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<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (300)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (321)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (326)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (343)
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<220>
<221> misc feature
<222> (354)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (356)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (358)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (365)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (366)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (372)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (409)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (411)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (415)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (423)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (425)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (426)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (427)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (435)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (436)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (437)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (439)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (444)
<223> n equals a,t,g, or c
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3310

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<220>
<221> misc feature
<222> (448)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (468)
<223> n equals a,t,g, or c
<400> 3688
gaatteggea gaggggeagt cacatetett ceteegagge cagtacettt ceatttatte 60
tttgatcttc agggaactgc atagattgat caaagtgtaa acaccatagg gacccattct 120
acacagagca ggactgcaca gcgtcctgtg ccacacccag cttcagcatt tccacaccaa 180
gcagcaacag caaatcacgg accactgata gatgtctatt cttgtttggg gacatggggn 240
tgnttatttt ctgttctatt ttgtgcttta gtcccattcc tttgcacana gtaggggtan 300
cccattcaat tanctnttgg natggnttta gggattgggt tnnccctaaa aatnantnng 360
ggttnntttt tnaaaaaaaa aaaaaaaat tcgnggggg ggggcccgnt ncccnttggg 420
                                                                  468
ccntnnnggg ggggnnnana gcgncgtngg ggggggggg ggggtgtn
<210> 3689
<211> 403
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (222)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (269)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (363)
<223> n equals a,t,g, or c
<400> 3689
agcaagccca ggcggcggtg gaaaggtgat ggggctggag gacacaccta aacatgtgga 60
atcccaatgc cgggcagcca gggccaaatc catatccccc caatattggg tgccctggag 120
gttccaatcc tgcccaccca ccacctatta atccaccett tcccccaggc ccctgtcctc 180
ctccccagg agctcccat ggcaatccag ctttccccc angtggggcc cctcatcctg 240
tgcacagcca gggtatccag gatgccaanc gttgggtcct accttctcca taccaacgct 300
gccctggaat cctctgtgaa tccttggtct ggcatgttga ccacatgata gtagacaaga 360
                                                                   403
gancagagaa aatgaagaag tcataaaaga tgcacagacc aaa
<210> 3690
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<211> 136

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<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c
<400> 3690
gngccgcacc cggggcctgg gtgagactgc ggcggnggca gggcgcggta cggccatatt 60
tgccggcncg gncccacccg ccgacaanaa aaagtgcgcg ggctcncggc gggcgntcgg 120
actggcgctg ggactt
<210> 3691
<211> 420
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (173)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (276)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c
<220>
 <221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
 <221> misc feature
 <222> (297)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (305)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (313)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (334)
 <223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c
<400> 3691
agaaattgaa acctggcgca atagatatag taccgcaagg gaaagatgaa aaattataac 60
caagcataat atagcaagga ctaaccccta taccttctgc ataatgaatt aactagaaat 120
aactttgcaa ggagagccaa agctaagacc cccgaaacca gacgagctac ctnagaacag 180
ctnaaagagc acacccgtct atgttgcaaa atagtgggaa agatttatag gttgangcga 240
caaacctacc gagcetggtg atactggttg tecaanatan atettagtne nactttnatt 300
tgccncagaa ccnctaatcc cctgttattt actnttancc caaaagaacg tctttggacc 360
ttgaaaactt ttaaaaattn aatttanccc tgttggcggg ggcnccttaa aagttcaccc 420
<210> 3692
<211> 430
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (248)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (346)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (374)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (382)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c
<400> 3692
gccactccac cttactacca gacaacctta gccaaaccat ttacccaaat aaagtatagg 60
cgatagtaaa ttgaaacctg gcgcaataga tatagtaccg caagggaaag atgaaaaatt 120
ataaccaagc ataatatagc aaggactaac ccctatacct tctgcataat gaattaacta 180
gaaataactt tgcaaggaga gccaaagcta agaccccga aaccagacga gctacctaag 240
aacagctnaa agagcacacc cgtctatgtt gcaaaatatg ggaaagattt ataggttgag 300
gcgaacaaac ctaccgagcc tggtgatact ggttgttcca agatanaatc ttatttccac 360
ttttaatttg ccnncgaacc cnctaatccc ctgttaattt acttttngtc ccaaaagaac 420
                                                                   430
actcttttgg
<210> 3693
<211> 506
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (437)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (461)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (468)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (504)
<223> n equals a,t,g, or c
<400> 3693
gccccaaacc cactccacct nactaccaga caaccttagc caaaccattt acccaaataa 60
agtataggcg atagaaattg aaacctggcg caatagatat agtaccgcaa gggaaagatg 120
aaaaattata accaagcata atatagcaag gactaacccc tataccttct gcataatgaa 180
ttaactagaa ataactttgc aaggagagcc aaagctaaga cccccgaaac cagacgagct 240
acctaagaac agctaaaaga gcacacccgt ctatgtagca aaatagtggg aagatttata 300
gggtagaggc cgacaaacct accgagcctg gtgatagctg gttgnccaag atagaatctt 360
aagttaactt taaatttqcc acagaaccct tctaaatccc ttggaaattt aactggtagt 420
ccaaagagga acagctnttg gacctaggaa aaaccttgga nagagagnaa aaatttacac 480
catagtaggc taaagcagca ccanta
                                                                   506
<210> 3694
<211> 494
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (211)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (223)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (234)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (321)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (329)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (355)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (422)
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<220>
<221> misc feature
<222> (430)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (451)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (491)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (492)
<223> n equals a,t,g, or c
<400> 3694
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nnnttttttt ttgagatgga gtctcactct gtcgcccagg ctggatacct gagaacttgt 120
aatccaatga gtagaaatgt tggtactcca tttatggctg tcaacctgcc agttctcagg 180
agtttgtata aaagcctaaa tccgaaaggn nctaatccca ttnggcccct tgtntccttt 240
tctgttgcct ttgcccactg gctntggaaa caggggtctt tctttctcct nggctatctt 300
tggatatggg gctccgtctt ntgtgccanc tnagggaatn cttttcaggc atggntaagg 360
cattaaaaag cttcagtttc agtaacattt tgagtgagta ctctctgaag cttcgttgga 420
anttaggttn tttgcttgaa ggtaactttt nggctaaaag tttttatcct aggttttggt 480
                                                                   494
ttaggccct nngt
<210> 3695
<211> 502
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (190)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (197)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (319)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (355)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (377)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (403)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (408)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (417)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (455)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (460)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (463)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (465)
<223> n equals a,t,g, or c
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3320

<220>

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<221> misc feature
<222> (466)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (489)
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<400> 3695
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gggccgcgaa cttttttcc tcaagctttc ctgagccctt tnatctcgca cgaaatggga 120
tnagtgaagg ggccggggct gcctggtgga ggggcccgn tcgcggcgag cccactccat 180
ctgaattcgn atctttntcc ccggcaggag ctgaagaaga agctgttcaa acgccggcgg 240
gtgttgaatc gggagcggcg tctnaggcac cgggtggtcg gggctgtnat agaccaaggg 300
ctgattcagg nggcaccanc tcaagaagcg ggcgttccat tgcaagtggc caaanttaac 360
attntcaagg aagaagngcn gaaaattctt ccagcaattc cgntttnncc agaaagngaa 420
ggcagccttg gaattggaag cccttttaaa gccanccagn ttntnnacca anttaaaagg 480
                                                                   502
aaagnaggna aagcccccag tt
<210> 3696
<211> 311
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (177)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (178)
<223> n equals a,t,g, or c
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<222> (181)
<223> n equals a,t,g, or c
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<222> (182)
<223> n equals a,t,g, or c
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<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (233)
<223> n equals a,t,g, or c
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<222> (241)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (245)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
<400> 3696
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ggcacgaggt tatttgccac ctatgtcatg attgaaatag ttaattgatc ctgtgaatca 60
gttagcaaaa cataactcaa tggaaagata ggcaaatgat acaaataaga aattcacaaa 120
agaagaanta ctaagtctct agtgatgaga ganatgtaaa tnaaaatgaa acatgtnngg 180
nnntcaagtt gtcacaagtt agacaatcat atccaatatt tttanaggtt gtnagactgt 240
naggnaatag ccactgtcat atcattttta aaggaatata aattataggg cctttngttt 300
                                                                   311
ctttgggttt t
<210> 3697
<211> 452
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (226)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (308)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (409)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (444)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (448)
<223> n equals a,t,g, or c
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ggagccacac agggtgagga ggatgtgtat ccactgggac gcttccgggc gggatgttga 60
atcccacaaa aggcaaggag gactgcagca cagggagtgg cccagctcac atggggtaac 120
aggeetetgt geaggggtgg tgtggeetgg aattgtgagt gggageteag atgggatgaa 180
gagggcagcc ccacggttgg agcacatgga gggtgatgag tgcagngctg aggctgaggg 240
aggggctgca gaatcatagg gaccggtgac agagaagggg ctggttagat gantaggtag 300
taaggatnat gggagcctgg cttcccagtg gcagacagag atgttggatt tgatttcaag 360
gtaatcttga aattactgtt gcaggctgct gnggaaaagc acatganana aatattaata 420
                                                                   452
gtattttaaa aactaagaca aaangtanag aa
<210> 3698
<211> 402
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (281)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (284)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (302)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
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<222> (397)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (398)
<223> n equals a,t,g, or c
<400> 3698
gagaagtete egaatetegg aacetggaga agaaggatgt ggaaactace agttetgtea 60
gtgtgaagag gaagcgtaga cttgaggatg cattcattgt gatatccgat agtgatggag 120
aggaaccaaa ggaggaaaat gggttgcaga aaacgaagac aaaacagtcg aatagagcaa 180
agtgtttggc caaaagaaaa attgcacaga tgacagaaga agaacagttt gctctggctc 240
tcaaaatgag tgagcaggaa gctagggagg tgaacagcca ngangangaa gaagaggagc 300
tnttgaggaa agccattgct tgaaagcctg aatagttgcc cggccttctg atgctttcgg 360
taccagaatc tinganctit tggncacttg gacccgnntt tc
                                                                   402
<210> 3699
<211> 435
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (137)
<223> n equals a,t,g, or c
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<222> (190)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (198)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (201)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (204)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (247)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (248)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (260)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (265)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
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<222> (272)
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<222> (277)
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<223> n equals a,t,g, or c
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<222> (283)
<223> n equals a,t,g, or c
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<222> (292)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (327)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (331)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c
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<220>
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<222> (356)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (371)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (372)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (408)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (414)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (424)
<223> n equals a,t,g, or c
<400> 3699
angggacaaa agttggaacc tcacctgngg tgctggccgn tctagaacta gtggatcccc 60
cgggctncag gaattcggca cgagattnag aacagettca tgactgcctc caagtageca 120
ccgcctggat gcagatngcc ggagaggacc ggcggctcgg aggaagcccc caccgtgggc 180
agggagcagn cggccagncc nttngcccca ggacctggnt gccatacttt cctgtatagt 240
ttcacgnntc atgttaattn ctcangnaat tnaaaangna ggncaaaaga gntgttattt 300
tttttaaaaa gtttttaaaa acagganagt nctngttngn tgtacatttt aaactngtnc 360
cccaaacttt nnncnttnga nccttttnna gngcccnagt tggggtnnca aggncagggg 420
                                                                   435
tagncaagta attca
<210> 3700
<211> 193
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
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3329

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<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (189)
<223> n equals a,t,g, or c
<400> 3700
ccatccggan tcccnggtcn tctgtgcagg ttggaggatg gttggttgtg ncgagcgagg 60
ctgaangage egggaegegg ggetetggge etegggaact gageengtne teaceteegt 120
accttctccc cgtcactgtc cgcatcatgg ccctacttac cctaangacg tgggcctcat 180
caacggncnc aaa
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<210> 3701

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<211> 365
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (57)
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<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (157)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (159)
 <223> n equals a,t,g, or c.
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 <222> (167)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (188)
 <223> n equals a,t,g, or c
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<221> misc feature
 <222> (257)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (261)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (262)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (311)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (312)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (332)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (341)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (354)
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<223> n equals a,t,g, or c
<400> 3701
ncccactga aaaagatgan tangcctgcc gtgtganccn tgtgactttg tcacagncca 60
anatagttaa gtgggatcga gacatgtaag caacatcatg gaggtttgaa natgccgcat 120
ttggattgga ttaattccaa attctgcttg cttgctntnt aatttanata tggttaaaca 180
cttacacnta atgcacaaaa tgtatggtta taataatgtt tacatggaca tgatctactt 240
tataagtcta ctttgantgc nntctccata ttatgatgta tctaaacaag ttgctccaca 300
ggttactcta nnaaggctgg cccttagaag tnggggacca naagattctc ttgnccaaac 360
                                                                   365
atcca
<210> 3702
<211> 443
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (336)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (371)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (405)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (417)
<223> n equals a,t,g, or c
<400> 3702
gctagctgct ctacggtcat ctttgcttag agtatacttt aacctggctt ttaaagcagt 60
agtaactgcc ccaccaaagg tcttaaaagc catttttgga gcctattgca ctgtggttct 120
cctactgcaa atattttcat atgggaggat ggttttctct tcatgtaagt ccttggaatt 180
gattctaagg tgatgttctt agcactttaa ttcctgtcaa attttttgtt ctccccttct 240
gccatcttaa atgtaagctg aaactggtct actgtgtctc tagggtnaag ccaaaanaac 300
aaaaaaaatt ttactacttt tgaaaatngc cccaangttg caaaattata taattctaac 360
ccttaaatca nttnaaangg ttggctgctt ttcaaccttg gcccnctgtg aattccnacc 420
                                                                   443
caaggaagaa ccctggaaca aaa
<210> 3703
<211> 477
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (286)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (299)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (324)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c
<220>
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3334

<221> misc feature

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<222> (349)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (362)
<223> n equals a,t,g, or c
<220>
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<222> (374)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (421)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (446)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (454)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (466)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (470)
<223> n equals a,t,g, or c
<400> 3703
caaaattatt ggctaactta tacaataatt ttgattaata acctgagaag ttaaaattat 60
tgtataagtt agccaataga atttttaggt taaaacaaca gatggggggt ttgtggagtg 120
tttaatgtca tgggcatttt tagtagcata gaccctttgt tctgcatttg aatgtttcgt 180
atatttttgt ttcacagtta atcttccctc cccaagtttg ctattcaaat caactgcctg 240
aatgacattt cctagtaatt ctgaagttat tttcctgaag gaatanttgg tgaatnccna 300
tgcaggtttt ttccatacca atancccccn ccccggaaaa aaaaaaccna aaccccctt 360
```

```
antaaaaaaa ccgncncttt tttttggggga aaaaattccc ccaaaagggg gaaaaaaaaa 420
nccttttaac caaaattggg cccccngggg ggangggggg gggggnaatn ttttaat
<210> 3704
<211> 349
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (246)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (268)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (283)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (301)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
<400> 3704
atcctatact ggttatagtt gatatgtaac agttggtgga ttttagattt ctttggattg 60
tgaaacaggg gagctatgag agatgtgtcc atgtgaaatt tacagttact gcctagggag 120
ttaatgatcg ttctgggtca gcttgaatgt ccccattcta taaattcaac acttattttc 180
tgaattcata aaaataacca aaaaatgtga gctataatgt ttccctcaag aacaaacaga 240
aacganattt gccaaaaact aaaattcnac aaatgatttt tantgggana ttgggctttg 300
nctttagcgt gttaattgga agcactgccc tttngaccgg aattttact
<210> 3705
<211> 458
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (299)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (319)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (356)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (357)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (403)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (429)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (434)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (442)
<223> n equals a,t,g, or c
<400> 3705
ccaatttcaa aatgtctcaa tggtgntata ataaataaac ttcaacactc tttatgataa 60
cnacnetgtg ttatattetn tgaateetag eccatetgeg aageaatgae tgtgeteace 120
agtaaaagat aacctttctt tctgaaatag tcaaatacga aattagaaaa gccctcccta 180
ttttaactac ctcaactggt ctgaaacaca gattgtattc tatgaatccc agaaagatga 240
aaaaaatttt atacgtttga taaaacttat aaatttcatt gattaatctc ctggaaaana 300
ttggtttaaa aaagaaaant gttaatggca agaatttaaa aaaatatttt ntaaanncac 360
aattatttta ttattnggaa tatccaactg gcttttttaa aanggtggcc ccccctttt 420
                                                                   458
ttcccttgng tccnttgggc tnggtcaaaa aattccct
<210> 3706
<211> 470
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (197)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
<220>
<221> misc feature
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3338

<222> (330)

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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (341)
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<220>
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<222> (357)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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gacgagtcca tcacctgcaa cttaaatgaa caagcttaca tcccattttg agtgaagatt 60
ttgaggtttt taatttaaag gctgtgtaca gttatacttt tttatacacc tgttcatttc 120
tacttaaatt atggcacaga ttgatgcgca ccagtcttga ggaaacgatc tccctattcc 180
cttaccctgt tactcancca cgccgtgtgt tagcttagcc tcaggtggcn agatgtttga 240
ggaaaaggaa ttatgccagg aaagtgggga ccgggtttat ggtcngggtt tcctattggg 300
aatgctcttt gttgcttttt gggcatcctn aatggaaact nttacattag aaccttnang 360
ttggaactcc cccccaaatc cgcccatatt tttaaaaatt tattttccac tcctattcct 420
tgcntttaaa acttgttact ccttttttgg caaaatttta accaattttt
<210> 3707
<211> 296
<212> DNA
<213> Homo sapiens
<220>
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (7)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (276)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (285)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (290)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c
<400> 3707
gnggngngng ggtccggaat tcccgggtcg acccacgcgt ccgagtaaat ctcatanaag 60
cacatgaaga acagcagtga aaccaaggat tctagcaagg ccagctatta gcaaagcagt 120
aagcaggaac tggactagat accaaatgat ggggaaacag actcatagac ctaagaacat 180
agaagaaaga natgttgaca tcaacagaaa ggcaaaaggg gcaatgcagc atctcttgcc 240
ttcctcctgg gtttttcccc cttaaattgn tttgangatt aaccnccaan cnacac
<210> 3708
<211> 333
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<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (278)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (290)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (333)
<223> n equals a,t,g, or c
<400> 3708
gcttttaaaa acgaacccca tttttgtgtg tatgtggaat attactacca ttcctgctgt 60
cttgtcttta gctctggaga aagttgagtc ttttttttag tctataaaaa tcagtgtcta 120
tataaatgtt gttcaggctt ccaatataac agatggttgg ggtttctaga gcaaagggtt 180
tttggatttc tcttttttct aggttaatgc tttacgtcca gttctttctt cattatttag 240
aaaagcctta atttttttt tttttttaa aaaaagcncc gggcattttn nctaacaaaa 300
aaaaaatttt nttaaaaaaa aaaaccccca tan
<210> 3709
<211> 348
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (299)
<223> n equals a,t,g, or c
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3341

<220>

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<220>
<221> misc feature
<222> (327)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c
<400> 3709
gatccatttc cctgttctat acaggtttct ttgaaaagac acaggggtta gggataagga 60
atagtanaat ttataccatt tttgctgcag agaatggcta cagatggagg ctggaaacct 120
gctgttaatc tctagaacac ttccccacac cagtgtgcca cacattagat actttattaa 180
gaaaatcact tcagtaaatg tttgaaaaat tatttcctag atctcttctt tttttccttc 240
cccaataaac tttggttgca cacaaaaact gttactgaac cctatgaatc tagaacttna 300
                                                                   348
cttccaagga aaaccaatta ctnaatnttt tcccctgaan ngaaattg
<210> 3710
<211> 439
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
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<220>
<221> misc feature
<222> (121)
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<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (158)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (181)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (257)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (266)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (282)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (301)
<223> n equals a,t,g, or c
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<222> (305)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (369)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (400)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (425)
<223> n equals a,t,g, or c
<400> 3710
agegeancae cacetttgag aagtetetgt tgatgggeaa ngagtteeag egeegeeca 60
angccatgat gctgcgggca gctgtgctcc gcaaccanat ccatgtcaag tccccgccca 120
naaaaaggac canggggaac ttactccacc aacaccantc ccggatgaac accaacatgt 180
naagggtgaa cttggcctcc aagacatctg cacccctcc ccacctccac ggaactcgga 240
actocaggeg eteaatnetg cetgengeea etaaagggee tngccatggt ttnceneeca 300
ncctnttttc ctccctgggg cttaagaagc agcngttcta tttttgcctt cctggaaaga 360
aaageteang etecacettt tgtttettte enggaacaan tgtegeneea gecatggaca 420
                                                                   439
ttccnaacct cttcccctc
<210> 3711
<211> 484
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (395)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (410)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (413)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (446)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (462)
<223> n equals a,t,g, or c
<400> 3711
taaacttaca gacactgaat taatttcccc tgctactttg naaaccagaa aataatgact 60
ggccattcgt tacatctgtc ttagttgaaa agcatatttt ttattaaatt aattctgatt 120
gtatttgaaa ttattattca attcacttat ggcagaggaa tatcaatcct aatgacttct 180
aaaaatgtaa ctaattgaat cattatctta catttactgt ttaataagca tattttgaaa 240
atgtatggct agagtgtcat aataaaatgg tatatctttc ctttagtaat tacattaaaa 300
ttagtcntgt tttggaatta attaagttcc ttttgggata angttggggg taatgtggtc 360
catnccctt aaanaaatcc nacnggttaa tatanccatt ttttattaan ggnccctttg 420
gccaataaat taaccctgaa aacctncccc cgaaaaaaac cnaaacttaa tcccccccca 480
                                                                   484
aatg
<210> 3712
<211> 285
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (278)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (279)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (281)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (284)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (285)
<223> n equals a,t,g, or c
<400> 3712
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cttggtcaga tttgaactct tcaatctctt gcactcaaag cttgttaaga tagttaagcg 60
tgcataagtt aacttccaat ttacatactc tgcttagaat ttggggggaaa atttagaaat 120
ataattgaca ggattattgg aaatttgtta taatgaatga aacattttgt catataagat 180
tcatatttac ttcttataca tttgataaag taaggcatgg ttgtggttaa tctggtttat 240
ttttgttcca caagttaaat aaatcataaa acttgaanna naann
                                                                   285
<210> 3713
<211> 385
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (246)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (273)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (320)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c
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3347

<220>

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<221> misc feature
<222> (335)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (349)
<223> n equals a,t,g, or c
<400> 3713
ggctggagct gctgctgttc tccctatcac tcgtggggaa gccaggcctg gcgaggtgca 60
ggcacttgct gaggtcacgg cggccanact ggagcccaga actctgtctg cacctaagca 120
cagtgtccct tacctccagc atctgagtcc catcgtctaa tgtggcttta acctcaggat 180
cgggcctaat tctagaatcc tacctgcaag acaagcactg agactgaaac aggangattc 240
cttganttcc aggaatttca aatccancct gancaacatn gtgaaaaccc catctctgca 300
aaaaaaatga aaaattactn ggctgggggg tnccnttcct nttaaatcnc ttcccgggaa 360
gggtaagttt ttaaaaatcc cctaa
<210> 3714
<211> 387
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (320)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (352)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c
<400> 3714
gnaaacagta gtttctctgc caaaaattaa aattaaaaaa accgttgtct gttttagcaa 60
aaccactgct tggtgagtta ttacaagatg tgtactatta aaaactcatc tttttcttca 120
gtgaatgtat attgagcatt tactgtttga aaatgcgttg ggtagcaagg ggagtctaca 180
ggggatatga gcctaatccg atacagagtc tgccttcagg gagttcacag cctcatgagg 240
aatagaaatt tctcactggt ccctaaaact ctcaaatata aggtcttgca gantgtccct 300
tgcatcatgt ttccttcctn aattacaaga aatagcatgg aaaaaaaatg cnttatgttg 360
                                                                   387
actatagatt tanatataga atccccn
<210> 3715
<211> 84
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<400> 3715
cccatgggta gccctgcccc agggggcaca tgctgtaatn ncaacaagtg tggcnanatg 60
                                                                   84
agagatgacc atgtgtatcc ncct
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<210> 3716
<211> 109
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<400> 3716
ttaaanttaa tttgagacat ctnattttcc ctctaaaaaa atgaagaaat ttttggatgg 60
                                                                   109
teccatecen ecteceete eccagngge netetaaaga atngaaget
<210> 3717
<211> 111
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<400> 3717
aacccnaacg ccagcaggaa ccggtccgga aancccgggt cgacccacgc gtccgatttt 60
ngagtttttn tgatgccaat atcaacnggg ggatttttaa aaattgtnaa a
                                                                   111
<210> 3718
<211> 155
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (154)
<223> n equals a,t,g, or c
<400> 3718
gctcaaattc agccagctcc agctgcccct ggcacagagg agctgactga ggctccagta 60
cagggcctgc teetteeect eetgtteeec teagtgtgee etgggeeggg ggeeaggeat 120
                                                                   155
ggtggggtg gggaggctgn cngcngaggc cnang
<210> 3719
<211> 381
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (336)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (358)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (368)
<223> n equals a,t,g, or c
<400> 3719
cttttnttaa caaaactcaa ccncattagg ggggaaaang cntgngttac cgccctgggc 60
cagggttacc cgggtcccgg ggaaatttcc cgggggtcgg gacccacgcg tccgcccacg 120
cgtccggggg aagaacattt tgcttatgtt ttaaaggtat gtattggggt aagaggagca 180
ttatatatgg gaacctctca caaaacaggt gattattttc ttattatact caattttcac 240
cctgaataga gtgttttgat tatgtaagtt agatcgtaag tagatggctc tcttaaagac 300
attttatggt tttgttgttg ttgtttgttt ttcgantcta ttaaatnaaa ggtcacantn 360
ggagtagncg atacagagaa t
<210> 3720
<211> 106
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (76)
<223> n equals a,t,g, or c
<400> 3720
gccgaacgca ggagaaccga tccgnatncc cggtcaccca cgcntccata aattacatgt 60
                                                                   106
ctntgaaatt tcattngggg cactaataaa attttcagac cctaat
<210> 3721
<211> 236
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (172)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (224)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (227)
<223> n equals a,t,g, or c
<400> 3721
tcgacccgta cagatgntgg ncagaagnat cccttaaatn aattgtctta tcacntggtg 60
tgtattaagg aatctgacat ccacacggt caacagtttg cagctaaatt caaaaaactc 120
tgntgccagg aaattcagca cattctctgc acacgaaacc tttgcaccaa angagagtta 180
tgactatctc aagacttctg gcttggcgat gttcatatng ngangangga gacttt
<210> 3722
<211> 137
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<400> 3722
cttttntttt acggaacttc acctcattag ggggaaaaaa ggctgggttt accggccctt 60
ggccagggnt tacccgggtt cccgggnaat ttcccggggg tccgaacncc acgtcgntct 120
                                                                   137
cggaaaaaaa aaaaant
<210> 3723
<211> 486
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (446)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (455)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (481)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (484)
<223> n equals a,t,g, or c
<400> 3723
ggtggagacc tgggagagag tgttaggaag accgaaaagg gcaggacggg gcctccactg 60
cctcccatcc ctggtccggg cccacatagc cttctttgtc acaatcagct caggtatcca 120
agatcagatt acccacattc attatttgag caactattca ttgaacagtt agaatatgtc 180
tcactctgtc agttgctggc tagaagtaga aagtaccaga tgagtgaaat aattggccac 240
tatccttggt agctgatgac taagtaagag agagatgcaa gacaacatgt ggaaaatgcc 300
aaactgagta gcagtcacag ttgacatgct gcagagagag ctggccgggg gtcagaagac 360
ctgggcacca gtcctgttca tttccagtgt ggcctcgagt cattcacctg acctcctgaa 420
gttcattttc ccaagaagtt gtttantcca actgnccatc aaggatcttt anggaccctt 480
ntanct
                                                                   486
```

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<210> 3724
<211> 99
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (96)
<223> n equals a,t,g, or c
<400> 3724
agncgaagag gcggcaagaa aaancnaggg agaagccagg taccnccntg naggaaacgc 60
ggtcgcggaa ancccgggtc gacccacgcg tcccantca
<210> 3725
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<211> 441
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (405)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (411)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (424)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (437)
<223> n equals a,t,g, or c
<400> 3725
ggtacccagt ggtggaagac caacacacac ctccgcagac agcccagcac gccagaaacg 60
gccacccgca ggccctgcca gccgctcacg aggctgtcta cagggagggc aagcccagca 120
ccccggagtc ctgcgtctcc tcttcatcag ccatcatcgc caagccagga gagtggctcc 180
caagaggacg ccaggaagag cctcgcccag ccccacggg gaccccccgc cagccaaggg 240
aggcgcccca ggacccaggc aatggagtga ccaccaggta agggggatat cacaaggcct 300
tgaacctgac tcttggagct ctgggagtgg gccgcccac gccggatgca agagcaccca 360
ggagacctgg aaagcttctc tgangcccaa cctttgacag gggangctaa ngagcagtgt 420
                                                                   441
caanattccc agcggantgc a
<210> 3726
<211> 294
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (36)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (78)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (261)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (287)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (289)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (290)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
<222> (292)
 <223> n equals a,t,g, or c
 <400> 3726
 ggaatttctt ctggctcaga aatttcccct gtaannacaa tatccatttt ttttattatg 60
 gaagtagagt agcaaagngc aatttgcttt ataggaattg tttttatagg caaggatgaa 120
 tttattccag agagcataga atatctattg ggttacttaa tattactcat tttgggtaca 180
 gagccatttg cagcccattg tacttcagga aacagctgag aaaatgattt gtgtgtaaga 240
 aggatgtttc ccattcaatt nccatgggtg tgggaggagg ggctttncnn gngg
 <210> 3727
 <211> 402
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc feature
 <222> (5)
 <223> n equals a,t,g, or c
 <220>
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<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (220)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (224)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (239)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (258)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (277)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (292)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (391)
<223> n equals a,t,g, or c
<400> 3727
ggtanatatt tttatcacat taagaaagtt tccttctatt attagtttgc tgatatgttt 60
tcttatgtga atgtatatca aatataatca gatacttttt ctgtgttcta tgaacatatt 120
catgtaattt tttctgttaa tgtgatgaat tgtattgatt aaattttgaa tgttacaaaa 180
aagccatagc aataantccc ttctaatctt tatagcttcn nttnttcctt cttgcctnnt 240
tgcactggct ggtaccgnta cggngtnaaa tagaagnggg aataatggac antcttgact 300
tgttcccaat ntcatgggga aagcttttaa tatncatcat taagtaanat tattgctatg 360
                                                                   402
gctttttggt aaatattttn atcacattaa naaaggttcc tt
<210> 3728
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
```

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<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (75)
<223> n equals a,t,g, or c
<400> 3728
tgcagcatgc tatngacaac atgaatgatt ctgagctctt ggnactatac aantggcgat 60
                                                                   104
aanctggtca aacgnaatga gaattaaggg aaatgcatgt acat
<210> 3729
<211> 270
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (233)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (253)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<400> 3729
ggtgtaagga agacatttgc ggtgcttctt gtcctataat gattcaagta tatagtagtt 60
cttgaaagag tgtgcatata ttactcatct gcttaagaga gtgggttaat ggatatatca 120
gaggagccaa atacattttt ttcagaactt gaaaaccaaa ggtcatcatg agtgcactca 180
aaagttagga caagtttatt acatttggga ttttcatctg tagccgtatg aanaaccctt 240
tccaatataa aancatggna ttaaattagc
                                                                    270
<210> 3730
<211> 62
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<400> 3730
gaaaactgtg gaatgtangn aaaccatact gcctaggttc ctttgnantc atctgaaang 60
                                                                    62
ga
<210> 3731
<211> 53
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
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3363

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<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<400> 3731
                                                                  53
ggacacatnt tcgaaacact anaaaacaan aaatactacc gtnaataaan aaa
<210> 3732
<211> 247
<212> DNA
<213> Homo sapiens
<400> 3732
ggagtgggtt aggaggggcc ctcggggagg gaagaacaag gagagaggga agtgagagga 60
aaggaggttt ctccttcatc taaatcccaa gtatacaccc ttctaaggtc tgttctggcc 120
cttccctagg gagtgccttc ccctctacct gccaggtccc atagataagg atgtcctccc 180
ctgcaggcgc ctggcctcca tcacagcatg cccactcttg tgcccgctgc aacctcctct 240
                                                                   247
gactctt
<210> 3733
<211> 247
<212> DNA
<213> Homo sapiens
<400> 3733
ggtgagatca gctccttaaa tggggatttg aaaacattag ggcttcatta tgtacacaac 60
ggcagtgcct cattcatcat gcaaaaatca ctcccgttat taaaaatccc tgtggcagct 120
gcatgccggg gcttggtggc atcgtgcctg ctggggacag agcaggagct ccacagccct 180
gcctggtcaa agttgtggcc acgggacagg ggccccaagt cccagcctcc ctcttacaca 240
                                                                   247
ggggccg
<210> 3734
<211> 368
<212> DNA
<213> Homo sapiens
<400> 3734
qqtcctqtta qaqaqqaqaa agactqtaat gaaactacta gacccatttg ggctaaagtt 60
tggcttttcc ttccttgagt catagaacat atccatctcc caggaaatgt ccttctctgg 120
cqtctqcttq cccttctqag tctgcctttt ttgcactgaa cataagcact ttatactaat 180
gggtcacaaa tcttgcagcc cttaatttgg gataagacca gattttcctg acatttttct 240
ttaacttaat ggaactatca aattataggg caccactgac tagactgata tgagatgagg 300
ctaaaagcct ttgaacacca cgctgtagtc tccaacagaa aaacaccacc aaaacagata 360
                                                                   368
cccatgtt
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<210> 3735

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<211> 99
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<400> 3735
aaaaggggcc gtagtagccg angatnatac acggacntnt atanggggaa tgattggtcc 60
                                                                    99
tncctgcngg tactcggtcc gttaattncc gggtcgacc
<210> 3736
<211> 278
<212> DNA
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<213> Homo sapiens
<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (257)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (278)
<223> n equals a,t,g, or c
<400> 3736
gccgggtttc tccaggccct tggcctggat ggggatgggg tcataggtct gcacagagca 60
ggcgtagacc cggctttctg ggcagtgtgc tgagttctca gttcctggcc ctgtgtacgc 120
tgaaacctc cctggtggtg gagctggcaa gagacctgct ggagttcctg ggcagcgtga 180
atggtctctg cagcagggcg agcctcgtca ccagcgtggt gtgggccatc ggcgagtcct 240
                                                                   278
gtngggacct acgatcngga ggtgcacccn tggancan
<210> 3737
<211> 303
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (301)
<223> n equals a,t,g, or c
<400> 3737
aagttgaggg agctcatatc caggcaggag ccgagcaagg tgccctctac agacctctgc 60
tgtatatggc tgtgaatatg ttgctgttct tggttcctgt gaattcgtga ttctggatgt 120
tctacattgt cctagaggcc ccaaaaagga tgggaagagg agcccatctg ccctggtgct 180
gaacatgtag ggatcgtggc taccaccacc ttcagctacc agcagatttg cagttcctct 240
cttccttaaa ttccttgtgt gcanacaaaa ataaaatctt cttcctctga tgaaaaanaa 300
                                                                   303
naa
<210> 3738
<211> 444
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (253)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (402)
<223> n equals a,t,g, or c
<400> 3738
gtaaaataaa aagcctcctg tttccccatc ccacttcatg aaggtaatga ctataacatt 60
tcttatgtgt actttcagat taattttact tatttaatag catatgtcct taaaatattt 120
tegacaaata ggattateat teteataeta ttategttet eataetgeat eeteettttt 180
ttgcttcatg atttttctta gaaatttttg ataaccagca tatacagatt tttacattct 240
```

```
cttagcaacc agnatagtna cctagccccn tgtttgacag aatgtttaaa attgtgttta 300
ttattttttt ttgtcacaaa ataatgctgc antggatttg tatatatatc tttatattct 360
 tgaaatggac ttagtaagtc agaggctttg tgaattntca gntttggtag attttaccat 420
attgccctcc taaaaggtta tacc
<210> 3739
<211> 50
 <212> DNA
 <213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
 <221> misc feature
<222> (13)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (14)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (37)
 <223> n equals a,t,g, or c
 <400> 3739
                                                                    50
 gcccacgcnt ccnnccacgc gtccgaaaaa aaaaaanagg ggaattttaa
 <210> 3740
 <211> 112
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc feature
 <222> (5)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (46)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (68)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (104)
<223> n equals a,t,g, or c
<400> 3740
ccaanaaaga aagcgaacgc ccgaggaccg accggaaaac ccgggncgac ccacgcgccc 60
gttttcantt aacncaagta cgtttaattg ggnacagagg aagntaaaag aa
<210> 3741
<211> 225
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (188)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (197)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (203)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (213)
<223> n equals a,t,g, or c
```

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<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c
<400> 3741
gnagaagtct gagatgagaa aaaaatgata taatatccac ctactacata gtgggtagtt 60
tatatactaa agttattgtt atgagaaaga atggcttagg aatattattt aaaattaatt 120
aagggggtgt taaaaataaa ataccaagtg taaaaatgac aaaggcaaga agaaacagta 180
tataatgnga gtaaatntta atntttccaa ganagganac agtac
<210> 3742
<211> 204
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (138)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c
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<400> 3742
gtttagattc tgcctgtgtg gtcattttaa aacatgtgtg acatatatca ntaccttcat 60
tcttctatat tttgtgtctc ctccaacctn caactttttt tgttttttga aaaatgattc 120
tctaacacct caacagtnta aggtaattta ntacacatat atcagtattt ttgtgatctn 180
aaaaagcaac ccatnttcta antt
                                                                   204
<210> 3743
<211> 201
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
```

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<220>
<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (168)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (184)
<223> n equals a,t,g, or c
<400> 3743
agtggaaaac ncnactatag ggtttagntg gnacgccngc aggtaccggt ccggaattcc 60
cgggtcgacc cacgcgttcg nccacgcgtt tngggagcat ctactggtgc aggcagacaa 120
nccaaataca naaggaaaag gtggaaatga acgcccaggc gtncaaanct ctattcttaa 180
                                                                   201
ccanttatgc taaaggcaag a
<210> 3744
<211> 50
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (29)
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 gctgcaatgt tacctgaggc ttcatttnnc ttncccancc gtgccaccat
 <210> 3745
 <211> 63
 <212> DNA
 <213> Homo sapiens
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 <222> (14)
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 <400> 3745
 tttggaatgc ctgntggaac gtccgcaggt accggtccgg aattcccggg tcgacccacg 60
                                                                     63
<210> 3746
 <211> 355
 <212> DNA
 <213> Homo sapiens
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 <220>
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 <222> (39)
 <223> n equals a,t,g, or c
 <220>
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 <222> (63)
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 <223> n equals a,t,g, or c
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 <222> (288)
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 <222> (298)
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 <220>
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 <222> (333)
 <223> n equals a,t,g, or c
 <220>
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 <222> (355)
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 <400> 3746
 tatanggaaa gttggtacgc ctgnaggtac cgggccggna ttcccgggtc gacccacgcg 60
 tenggacetg aaactgatee acaggeatae agneaataaa tgagetttea atgaaageag 120
 gtcaatagaa gaaaataaat natttcaatt aatggacttt catatggagg tgggggagac 180
 caacaatgnt attntccctc acactacata caaaagtaat tggaggtgca ntatacacca 240
 aaacttaaaa gttaaagata taaagnattt caaggatact ctgtaggnaa agattagnct 300
 accaacaagg aggacactga aaaatattat aanaagacat gataaattag acttn
 <210> 3747
 <211> 281
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<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
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<222> (43)
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<222> (75)
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<220>
<221> misc feature
<222> (140)
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<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
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<222> (271)
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<222> (274)
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<222> (280)
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cactatatgg aaagntggta cgcctgcagg taccgggccg gaattcccgg gtcgacccac 120
gcgtccgctt ccattatccn taaatattga taaactccca ggcnccaaag aaaacattgg 180
cttaattgtc tgaaaagaaa caagagaaaa acactggtat ttttatgtct gtattcaata 240
tggtataaaa tataaaaant atattttaac ntanngaaan a
<210> 3748
<211> 67
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
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<222> (60)
<223> n equals a,t,g, or c
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<222> (66)
<223> n equals a,t,g, or c
<400> 3748
ggaaaaaatt agagtgttca aagcaggccc gagggggcgc tcgagaggna aggnntggtn 60
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67
tgccgng
<210> 3749
<211> 475
<212> DNA
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<222> (395)
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<221> misc feature
<222> (458)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (460)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (474)
<223> n equals a,t,g, or c
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teatgeteee tgtacgeeae tgtetettag atataattat ecceaecete tgeteatttg 120
tttcccagat tcaatacatt gtcaaagcct cttggtcctt ttttaacatc tcacacttgt 180
gtcattctct ccattcccat aaacctcaac aactgctcaa agtcctgctt gaccccttgt 240
tgccagtctt tgaaatcttt cttgcatatg actgcctcat taccttccta aaatctagtt 300
cactegecta etcaagaana cacaggggee tactgtggtg tattagataa gtteacattt 360
cttctcttta ctaatctttt tacttccttt accancactt cccttatata aattccatca 420
ttctaattag aatctggttt cccctacaca ttccctgncn tctttcacnc ccana
<210> 3750
<211> 104
<212> DNA
<213> Homo sapiens
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<222> (29)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
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aggcccaccg gggaaacact taggaaaant cccgnaaggc cccagcaggg accggaccgg 60
                                                                    104
aagaccongg conaccoacg ttttcnaacc atttaaaacc aaag
<210> 3751
<211> 103
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (34)
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<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
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agctacnaaa aatannagcg gaacaagcaa agcnaggcat aaggtacaga ttccggctcg 60.
aagacaccag acngaagcaa acagctgcgc atccaaacca aca
                                                                   103
<210> 3752
<211> 112
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (104)
<223> n equals a,t,g, or c
<400> 3752
ganttcccgg ttcgattcac gnttccgaca cgcggcagcc cncgggagag ctgggtcagg 60
necggaaaag ccacacetga anetgagget ggaageecae gaenteetga tg
```

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<210> 3753
<211> 116
<212> DNA
<213> Homo sapiens
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<221> misc feature
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<400> 3753
gngaccgtta cacttgccag cgccctagcg cccgctnctt tcgntntctt cccttccttt 60
ctcgccacgt tcgccggctt tccccgnaag ctttaaaccg ggggctccct taangg
<210> 3754
<211> 144
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<400> 3754
tgactcttaa tgcctatggc aatatgannt tacttgaaga aacatgatac atctttaatg 60
naaacacagc gccacttcac acactanana atgtgggaga ccnaatatct gagttaggna 120
                                                                    144
agaatttaaa aaaacacata aggg
<210> 3755
<211> 123
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (23)
<223> n equals a,t,g, or c
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<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (85)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (118)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
<400> 3755
tgaccagngg nggcaactgt gangcccggg ccggtgagga ggaggagccg cagccnggag 60
agaaggtcag cgccggcggg agcgnctggg ccctccgcct ccgtcctcac gnggcccnac 120
cna
                                                                    123
<210> 3756
<211> 655
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (309)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (589)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (631)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (639)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (644)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (651)
<223> n equals a,t,g, or c
<400> 3756
nggttcccct gcaggtcccg gtccggaatt cccgggtcga tccacgcgtt cgntnccaga 60
nctttgttgt gngtgcccct tgaggcgttc atncagcact gtttcagaga aatccctatt 120
tcaatctatt cctatacgtt agttattgaa aagcaataga caatcacaaa aaacaagttg 180
```

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acctttttgt gttccttgag ccaaagggcc ctcatgactg ggcctcacac cgaataactc 240
gttacaaaaa gagctagggt cccagactgc gccaaaagct tcaggagact gctcctcgtc 300
tgtgcacana tgagtggcca actctggagc ccaggttgtt gcttcctagt ctggtggtga 360
atccttcata gtctgaggtg cttatttagc aaattcaacc ttaaacctga gtgcatggaa 420
actattgatg cagtgtccaa ggtggagaaa ggtcagagtg gatccagagg agccaagaga 480
agacgtccag catggtgacc tgggctcaag tcaaggtcct tatttctctg atttctggtc 540
agaaaacaca tetteaggaa aateaceet gacteaceea ggetaagtna caagettttg 600
gtataaggtc tcatcacacc atatgcctct ntttaaaanc aggncctgca naaat
<210> 3757
<211> 240
<212> DNA
<213> Homo sapiens
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<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (6)
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<222> (7)
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<222> (9)
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<222> (86)
<223> n equals a,t,g, or c
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<222> (127)
<223> n equals a,t,g, or c
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<222> (179)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (182)
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<222> (197)
<223> n equals a,t,g, or c
<220>
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<222> (220)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (230)
<223> n equals a,t,g, or c
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aaaannnang gaaatccata atgaaacagc aaaaaagtac tccgctgctg ggtttggaca 60
atgaacatgg gattagtccc aagctngtag cttggaacgg tagcattttt gcctgcgtga 120
teettgneag etatteacag aaggaaatet teegaaaete egtettteat ttageeggng 180
angetgttat cettetntge aattageatt catgtgggtn tategetetn tecaactetg 240
<210> 3758
<211> 179
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
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<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (138)
<223> n equals a,t,g, or c
<220>
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<222> (150)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
<400> 3758
ccccagccag cctaagacta ngaatgtgga gcctgaagat cnaagatccn ancatgtaca 60
tngtatggaa atatgtgcat atttgtacat aaaatgatat tctgattgat aaataaacag 120
acaaaacttg aaaaaaanaa aaaatgcagn aatccnaagt aaatggnccg ctaactagn 179
<210> 3759
<211> 521
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
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<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (435)
<223> n equals a,t,g, or c
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<222> (454)
<223> n equals a,t,g, or c
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<222> (461)
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<220>
<221> misc feature
<222> (470)
<223> n equals a,t,g, or c
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<222> (501)
<223> n equals a,t,g, or c
<400> 3759
qatattttcg cgcgcgcttt tgnaaagtag ctttggctac gtgggcgggc agatttttna 60
aagttccatt ngcactgcag cgctgtttgc gtcctaaatg cgatattgta atgtttaata 120
tccagctatt atgtagcttt atcttttca gcttctaata ttttgttgct gtttaatttt 180
tttggcatgc cttttagtcg agttgtatat acgaagtcac agtaagaaag ccaattctaa 240
gactcctaag gaatattatc ggttaaatta cagaaggcaa atcccctctt tangatggga 300
gaatggactt gaagggagga atgtggcaag ggtccctcag aagtgaggga gcccgctgtt 360
cctccttcag gcatttgcgg atggcactgg tgatcacaaa aaagcggaga ttacgctgcc 420
gggcgctcct gtggnagagg gactggaaca ctgncccatg ntgagtgaan aatgccatca 480
actttaccag gtgccccgta ncctaaagcc acgtccccac t
<210> 3760
<211> 99
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (14)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
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<222> (55)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
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<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<400> 3760
ggacgacacg tagntgacaa nnagggaccc agaccccgcc gggaccngaa ctccnggttt 60
                                                                    99
cgacccgnng cgctataccc gnttggantc aaaccccaa
<210> 3761
<211> 388
<212> DNA
<213> Homo sapiens
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<222> (16)
<223> n equals a,t,g, or c
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<222> (33)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (40)
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<222> (53)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
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<222> (118)
<223> n equals a,t,g, or c
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<222> (127)
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<222> (176)
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<222> (188)
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<222> (200)
<223> n equals a,t,g, or c
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<222> (265)
<223> n equals a,t,g, or c
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<222> (272)
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<222> (277)
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<222> (278)
<223> n equals a,t,g, or c
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<222> (290)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (336)
<223> n equals a,t,g, or c
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<222> (359)
<223> n equals a,t,g, or c
<220>
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<222> (376)
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<221> misc feature
<222> (386)
<223> n equals a,t,g, or c
<400> 3761
cgaaccgggc catcgngcct gatagacggg ggntcgcccn atgacgttgg agnccacgnt 60
cttaatagtg gactcttgat ccaaactgga acaacactca accctatctc ggactatncn 120
tttgatntat aagggattct gccgatttcg gcctattggn taaaaaatga gctganttaa 180
caaaaatnta acgcgaattn taacaaaata ttaacgctta caatttaggt ggcacttnnc 240
ggggaaaagg tgcaccgaac cccnnatttg gngatanntc taaatacatn caaaaatgta 300
tcccgctcat ggagacaata accctgataa atgctncaat atattgaaaa aggaagagna 360
                                                                    388
tgagcattca acactneegg gegeenta
<210> 3762
<211> 276
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
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<222> (52)
<223> n equals a,t,g, or c
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<222> (81)
<223> n equals a,t,g, or c
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<220>
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  <222> (90)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (116)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (122)
  <223> n equals a,t,g, or c
  <220>
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  <222> (126)
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  <220>
  <221> misc feature
  <222> (131)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (136)
  <223> n equals a,t,g, or c
   <220>
  <221> misc feature
  <222> (146)
  <223> n equals a,t,g, or c
  <220>
   <221> misc feature
   <222> (163)
   <223> n equals a,t,g, or c
  <220>
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   <222> (224)
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   <220>
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   <222> (233)
   <223> n equals a,t,g, or c
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<222> (242)
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<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (253)
<223> n equals a,t,g, or c
<400> 3762
acnnetgeag gaeeggeegg aatteeeggg tegaeecatg egteegggea tntttaaaca 60
agacaaataa aaacgttaag ngggaacaan tcacagagag ccacaaagcg gatttnacac 120
angeenagea naccanaact eteggnagtg getacaaggg aanaaaggae tatgtggate 180
cctgggggct atgcaaatac ctacctcaca agagttgttg taanaagact ggnggtttgg 240
                                                                   276
gnncaaacct tgngattaaa gagtttgcaa cgcatt
<210> 3763
<211> 382
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (209)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (254)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (274)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (327)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c
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<400> 3763
tgagcangan ttaccaacgt aataccaacg ggctaganat nggtaacanc cctcaaaccc 60
tacgagette tgtaggetat etgeataatg tgeecattgt aggaaaagat tggttneage 120
agacaccgta agccatatag tactgtggtg cttagcaaga aggctttact tatctgtgga 180
tgttntcttc aaaagcagct tcaggtttnt agttggttca catgtccttt caggtctatt 240
aacctgatag gtcnggctga ggcgggggca attnttatcc aggtataatg tacccacggt 300
ttaactcctg cccaatngat gaatgcntgg tcagaaggac ctcatagngg tcttaccctt 360
tgaggggctn gttngtgatt ca
                                                                   382
<210> 3764
<211> 411
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (175)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (286)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (301)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (303)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (326)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (411)
<223> n equals a,t,g, or c
<400> 3764
gtgtntctgc ctantaccag tattagtgag acngnggatt ttatcagagt tnaatgaaag 60
aaagettace cetgecetea etttgtgttt tttatttte eeeetttete aageaceaeg 120
tatttggacc tgagaagtgg catagctgct aagttgactt ttaataaaaa actgnttgtg 180
cctgagggaa atatatgcct ttttaaaaag tacctcagaa catgttccta gatcgtctca 240
teggttttgt ttggtgggga etgggaagtt eageaggaag tattgnetgt gtgtgatgae 300
ngngcagtat tgccagtcgg caatgntgta ttttgcattc ttttatccct aactctgaat 360
ctaggactcc atgaaaagcc ngngtcaccc caaaacattc ttccaataca n
                                                                   411
<210> 3765
<211> 122
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<400> 3765
ggannacagc cagagcgaag acgccnagac tgcagaggaa acggaggctg agcggngagc 60
accaaggctg gcncttccag caccagccgc agcatcaggg ggcccgccca aancaaggca 120
<210> 3766
<211> 357
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (144)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (203)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (223)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (226)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (241)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (245)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (303)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (312)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (329)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (357).
<223> n equals a,t,g, or c
<400> 3766
getttactgg atcacattng ntacagaaac ccaaactcat tatgatgata atttgaccet 60
tttagaagaa ncctgngata atttacatgc canccataat ngaatctcng gtacatggca 120
catgcattcc agtatggaac actntctagc cctaccccta tcctttaagg ctcaggggac 180
agntactate actqtgaage etnteeegta acaetetqqt tangnnneaa tattgeeaen 240
naaantggat gtctaggttg tgggggttcg ggggtcaatg cctcgttcca ctccagatat 300
tenggeactt thecateate etteatagne tecaeataat ngggeagtea ataatgn
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<210> 3767
<211> 152
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
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<400> 3767
gggtaaaatn ccccgggtgn acttattagn gtggaaaaaa ggcnttgggg taccccttg 60
gcaggggtaa ccccggggtc cccgggaatt ttccccgggg gttcgnaccc cnacgncggt 120
ccggcattta tttcannaat gattggaaaa gg
<210> 3768
<211> 134
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<400> 3768
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aaacnggcca ccgcnnggcg cagcctgaat ggcgaatggc tgctttgcct ggtttccggc 60
atttttaaac cnggggcgga aaggggggct ggaggggnag atttttaaaa acgncgatnc 120
ccnggggccc aaaa
<210> 3769
<211> 159
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
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<222> (122)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<400> 3769
concetecng taaaggneee gggeeeggge ccaaaggnee neeegggeee ggggggeeea 60
aagggggggc ccccaagggg ggttttctaa ggggaaaggc ccaaagggnc ctctccaaac 120
                                                                   159
cnccaaattg ggnggggna aattgggngc gcggaaagg
<210> 3770
<211> 553
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (487)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (523)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (532)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (549)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (552)
<223> n equals a,t,g, or c
<400> 3770
gtattttagc actaatttaa actgtttggt aatccctcta gacatctaat ctgtggcccc 60
agtgagtgca tgtgcaatgt tttgtagcgg tcattttttt ttaagtatta acacaatcat 120
acttcctctt taaaaggagt aaaatgtgtt agaatggcta ctgctgctgt tagaatctgt 180
gaaaaaggga aagtcacctt tcacctaggg ggtcctgtgt gtttcttgga agagaggggc 240
ctagagtaag tacatgcccc ttctccaggg tgctttcaca tgtgtttgaa tccatccctt 300
gtcacttgtg atccaggetc aggtaataca aggtttcgtg gtatgccatc ccatgaccaa 360
aacttgtatt gctagaggcc acgaccagta ctgaaacact caagaatata cccagttcaa 420
```

```
tgctcagatt aacttttgat actggcatgg gcataagcat ctggtcctac ctctcctgcg 480
  tcacctntca gctgtatcat agccactgcc aagaagtgct ccngtaacca cncttagctt 540
                                                                     553
  aaggagccna cnt
  <210> 3771
  <211> 76
  <212> DNA
  <213> Homo sapiens
  <220>
  <221> misc feature
  <222> (9)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (10)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (53)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (56)
  <223> n equals a,t,g, or c
· <220>
  <221> misc feature
  <222> (69)
  <223> n equals a,t,g, or c
  <400> 3771
  gcccagtcnn gctaattcca gaaacttgtg gttttttcat agggctgtgc tgncantgac 60
  tagcatggng caatga
  <210> 3772
  <211> 60
  <212> DNA
  <213> Homo sapiens
  <220>
  <221> misc feature
  <222> (8)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (52)
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<223> n equals a,t,g, or c
<400> 3772
gctcacanat tattaagtat acctgaatct tggtttcttt ttataactga gnaataatgg 60
<210> 3773
<211> 480
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (386)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (460)
<223> n equals a,t,g, or c
<400> 3773
geogectggg cogecgecte ttgtcagecg cogecaceca ggccgtgcct cagaagaact 60
cataagaatc atgcaagctt cctccctcag ccattgatgg aaagttcagc aagatcagca 120
acaaaaccaa gaaaaatgat ccttgcgtgc tgaatatctg aaaagagaaa tttttcctac 180
aaaatctctt gggtcaagaa agttctagaa tttgaattga taaacatggt gggttggctg 240
agggtaagag tatatgagga accttttaaa cgacaacaat actgctagct ttcaggatga 300
tttttaaaaa atagattcaa atgtgttatc ctctctctga aacgcttcct ataactcgag 360
tttatagggg aagaaaaagc tattgnttac aattatatca ccattaaggc aactgctaca 420
ccctgctttg tattctgggc taagattcat taaaaactan ctgctcttaa cttgaaaaaa 480
<210> 3774
<211> 100
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<400> 3774
gaaccccnga ggagggngag gagcaatata tgnacaatac ataatggcng ggcgaagaat 60
                                                                   100
ataaatgaga tactatacat tagaaattna caagcattgg
<210> 3775
<211> 129
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<400> 3775
atggntaatg ggacagacgg ataattaccc gaattaacaa ccacactgct tngaatncta 60
cncacagatg caccagtac actaagtgat gngggtaatg ctaactacat ttaattggng 120
```

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129
ataaaatcc
<210> 3776
<211> 124
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (104)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
<400> 3776
cncccagcgc cggtcagtnc tagatgacca cctatggaga gtactccnnt aacagccatg 60
acceteacta egggaggeag acteaengat tgtgggaaac actnatggge ngatgtaaga 120
aata
<210> 3777
<211> 77
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c
<400> 3777
ggtcttggca gtgcanatgc caaaactgag tggttggatg ccaaacacca catncttgct 60
                                                                    77
cattctacnt ttnatna
<210> 3778
<211> 383
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<220>
<221> misc feature
 <222> (324)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (333)
<223> n equals a,t,g, or c
 <220>
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<221> misc feature
<222> (338)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c
<400> 3778
gcccacgcgt ccggtgcgct cgcggttctc tcgcggaggt cggcggtggc gggagcgggc 60
tccggagagc ctgagagcac ggtggggcgg ggcgggagaa agtggccgcc cggaggacgt 120
tggcgtttac gtgtggaaga gcggaagagt tttgcttttc gtgcgcgcct tcgaaaactg 180
cctgccgctg tctgaggagt ccacccgaaa cctccctcc tccgccggca gccccgcgct 240
gagetegeeg acceaageea gegtgggega ggtgggaagt gegeeegaee egegeetgga 300
gctgctcccc cgantgccca tggntacaaa ggntgctnag catgagccgc ccgcctggga 360
                                                                   383
ccccgttgcc ccaattcngc cgg
<210> 3779
<211> 67
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
<400> 3779
gaagaaattg ataaagtaaa agcttcgtta tacatttctt tttgggaggn gncatcgnct 60
aanntgc
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<210> 3780
<211> 191
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (84)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
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<400> 3780
taacceggca necettngca aacetttaan ttaagggggg ggggtaaaaa aaagggeeet 60
ttgggggttt aaaccgggcc cccnttgggc ccaaaggggg tttaancctc cgggggtttc 120
ccccqqqqq naaaatttt ttcccccqq qqqqqqttt cccqqaaacn ccccaaaccq 180
                                                                   191
tcngnttttt c
<210> 3781
<211> 53
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<400> 3781
                                                                   53
ggactanttc tagatennga geggeegnee tttttgggtg teegttneae gta
<210> 3782
<211> 375
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (284)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (356)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (357)
<223> n equals a,t,g, or c
<400> 3782
ggaacancct gaaggactgc ggcctcttct gaggggcagc ggggcctggc gggatgggcc 60
accgccgact ttgtaccccc caacccctga ggaagatggg ggcaagaaga tcacgctccc 120
cgcctgttcc cccgccgctt ttctcctctt tcctctcttt gttctcagct ccccctgtcc 180
cctcagctcc agacgtaggg gaggggttgc cacaggcctc cctgtttgaa gcctgccctt 240
gtctgaaatg ctggtaatgg ccatggtacc cccttctggg catntgntct ggtttttaac 300
cattgcttgt tctgtgatga ggggaggggg gcacatgctg antctcccaa ggctgnntct 360
                                                                   375
ggaggggccc ctgtt
<210> 3783
<211> 265
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (188)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (230)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (257)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (262)
<223> n equals a,t,g, or c
<400> 3783
gcggactngt gggggcngtt tgatcactga tcgagtaagg aatgaccttt aattgggcga 60
attttggttt tggtttttta aaattttttn aacccagaat gatttctcct gcttccttct 120
nctnaccatc ttcccagacg gagttcaaag gccacttctn aagcagcttt tggcaccttt 180
agcctcanaa gtggaatctt ttaaagacag gacccctatg ttcaggaaan gggaaaangg 240
                                                                   265
acttttgcaa tgatagngac cncag
<210> 3784
<211> 505
<212> DNA
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<213> Homo sapiens
<220>
<221> misc feature
<222> (411)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (470)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (491)
<223> n equals a,t,g, or c
<400> 3784
gtgatattat actctatcct gggccagaga agataatgtt ctttaatgtt gtccaggaaa 60
ccctggcttg cttgccgagc ctaatgaaag ggaaagtcag ctttcagagc cagtgaagga 120
gccacgtgaa tggccctaga actgtgccta gttcctgtgg ccaggaggtt ggtgactgaa 180
acattcacac agggctcttt gatggaccca cgaacgctct tagctttctc agggggtcag 240
cagagttatt gaatcttaat tttttttaat gtcaagtttt gtataaataa taaagaactc 300
cttattttgt attacatcta atgcttcaag tgttgctctt ggaaagctga tgatgtctct 360
tgtagaagat ggactetgaa aaacatteca ggaaaccatg gcagcatgga nagcetetta 420
ntgattgtgt ctgcattggt attgtggaag atttaccttt tctggtgtcn taaagcttaa 480
                                                                   505
attgnttttg ntgggacttt ttacc
<210> 3785
<211> 226
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (189)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (198)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (204)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (215)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (224)
<223> n equals a,t,g, or c
<400> 3785
gcgtggttta gacctgctgt gtggcagaca atgggaagcc tgtgtgtcgt cctgggtgcc 60
ggatttagac aatatttagc tttcccttgg tggaaaagcc tttcccctcc tgctttgggc 120
aggaactggt tcctgttggg cggggcctgg ctgctgccc accccaccc ggcgggcacc 180
                                                                   226
ttgaccggna gctctccnga ctgntccctg cctgngcccc tganca
<210> 3786
<211> 177
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (175)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (176)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (177)
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<223> n equals a,t,g, or c
<400> 3786
agaaattcat gcatctattt ataatacctt ttgatacatg tgaaaattaa gaagtttgtt 60
tcagtacttt agaaatacaa tgagggaata tccgatctag cctggtccag gaaaagggaa 120
gaagactgag gcagcaggaa aggctatcag gaagtaaacc ctccggggnc ntggnnn
<210> 3787
<211> 50
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<400> 3787
                                                                   50
gactaagttt tagatcgtna gcggccgccc ttttttttng nttttatnga
<210> 3788
<211> 177
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (168)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (173)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (174)
<223> n equals a,t,g, or c
<400> 3788
ggaagtntta tgttttatga ttgagcatta gtgtcatnct acaatcagcc actccncaaa 60
ngttgcatca ctgaaactcc aggtttcaca gagaatttcc taaggnatta ggtttgagtt 120
<210> 3789
<211> 196
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
<400> 3789
gcagggnntt tccccagttt ctgacttgaa gtagactgng aagaatccac gaggtgctat 60
ccggccagan ttaagnanat tctatttcct tggttctccc tctccctgag gacctcttat 120
```

```
tttattgncc cctcttctag gtnaantctc ctttgatttg actttgttga gaaggaggtn 180
ggacagtaga ttagcn
<210> 3790
<211> 197
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (168)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c
<400> 3790
gaaaggtttn aagtggtatg cagtgntttt atgtcctnca taactgattt aaattagtag 60
gactattttn atcttncaac ttttaatttn cttataaaag tcaagtaaat acaangattg 120
ttattagctg aatagcagat gagatctcag natttaaaag aacagatnnn ttcttataaa 180
ctcgcttttg attttaa
                                                                   197
<210> 3791
<211> 161
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (144)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c
<400> 3791
ggagattttg gatggcaacg atgagaagta caaggctgtg ctattacttt ttgagctttg 60
caagttgtgt acataataat tctaaagaag ttactttgtt tgcaatgcat caaattnaaa 120
```

```
tgatgngatt tttttgtan tatntgatcn tagtgacagt g
                                                                   161
<210> 3792
<211> 51
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<400> 3792
gctgtgttnc agaccgtgtc tgacttagtg naacctaggn gattttatan n
                                                                   51
<210> 3793
<211> 110
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (105)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<400> 3793
gggnctttgt gataccacaa atcccaagcc ttcccttgcc tgaccaatac ccatcaaggt 60
                                                                   110
ctgtgatttg acttggtgca tattggtang nccagggnag gcttnngatg
<210> 3794
<211> 88
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (64)
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<223> n equals a,t,g, or c
<400> 3794
ggggntttgt tgctgtcctg gctgtcctaa ccagggggtg ggcattcgga actnngggcc 60
                                                                   88
ntantgggaa ggggaacgaa gaaaaacc
<210> 3795
<211> 82
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<400> 3795
gcaacttcat tctcaaagag tagcaagttg tcatgagggg ccntnaatga caacttcata 60
                                                                    82
ctnaaanaga ancaagcgtg ga
<210> 3796
<211> 179
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
<400> 3796
gntggtatgt gctatnaaan atatcaatan tgcgtcatgc caagatcaca cagcatggag 60
acacatgttc acgcagataa cacagncacc gcgtccctac cctggcgcat atgccatggt 120
cgatcttggc aanaggggaa cattctgngc gantttccct ttggccgtca attggtctn 179
<210> 3797
<211> 95
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<400> 3797
tttttttng ggggggggt ttaaaaaaaa aanaaggntt aancccccc gggggaaaac 60
ccttttnaaa aaaaccagtt ggaaaggttt atttt
<210> 3798
<211> 240
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
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```
<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (161)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (193)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
<400> 3798
gncctetgga eccaetennn eetteetgee etgtttgege agggacatea eccaeatgee 60
ccagctctcg gaccctgcan ctctgtgtcc caggccacag caaaggtctg ttgaacccct 120
ccctccattc ccagttatct gggtcctctg gattcttctg nttcttgaat naggctctgc 180
tttaccccta gcnactacag gnaagcctct gacagtggcc gctttacttg cattctgcan 240
<210> 3799
<211> 89
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
  <222> (8)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (10)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (28)
  <223> n equals a,t,g, or c
  <400> 3799
  ntcntttntn cgtccggtac atactggnct ctgggagtac attgaacaag ccattaaaat 60
  taaacaagcc ttaaaaaaaa aaaaaaaaa
  <210> 3800
  <211> 250
  <212> DNA
  <213> Homo sapiens
  <220>
  <221> misc feature
  <222> (32)
  <223> n equals a,t,g, or c
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  <220>
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  <222> (109)
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  <220>
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<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
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<222> (248)
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gagctgagga acgaaagaaa cttcgacaag anaatggaaa tgtacatgct atagcntaac 60
tgaanataaa attacaggat atcacattgg antcactgcc aagtcatanc cntaaatgat 120
gagtcggtcc tntttccant ggatcataag acaatggacc ctttttgtta tgatggnttt 180
aaactttcaa ttgtcacttt ttatgctatt tctgnatata aaggtgcacg aacgtcnnaa 240
                                                                   250
gtattttntc
<210> 3801
<211> 54
<212> DNA
<213> Homo sapiens
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<222> (32)
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                                                                   54
ggagccacaa tntgcactgg ggtntcaaag angactacnt ntggaaattt ttta
<210> 3802
<211> 300
<212> DNA
<213> Homo sapiens
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<222> (28)
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<221> misc feature
<222> (29)
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<220>
<221> misc feature
<222> (32)
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cacagtcctg gctgggggct gtggggctgg gccaaggcca ctgaaatctg gtagacaagg 120
aaaggagagc tggggacggg ggagcccaga acacaaggct gacagcacaa agagaaagcc 180
ctctgtcccc aacaaccta gaaatcaaca tccccaagct cgcatggccc aaacacacta 240
agaaatacga ctcagaaaat caacagggcc agtggaccca tggatccatc tcagggagac 300
<210> 3803
<211> 116
<212> DNA
<213> Homo sapiens
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<222> (25)
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<222> (56)
<223> n equals a,t,g, or c
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<222> (112)
<223> n equals a,t,g, or c
<400> 3803
gccgacgcgn gggaaaaaaa ggggngaaat aaaaaacacc agaggagaaa aaagangaaa 60
nagaaaaaat aaaagcatat ccctatatgg aaggcgaacc tgaggatgan gnctat
<210> 3804
<211> 125
<212> DNA
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<213> Homo sapiens
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<221> misc feature
<222> (66)
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<221> misc feature
<222> (74)
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<221> misc feature
<222> (75)
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<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
<220>
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<222> (125)
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ggctanggag cccnnaggtg cgcatgatgc tgagactgaa agggcctttt ggtactgaaa 120
ggcnn
                                                                    125
<210> 3805
<211> 152
<212> DNA
<213> Homo sapiens
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<222> (22)
<223> n equals a,t,g, or c
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tggagagtca ccacnttaag ggcatttacn ccgaaacaga nnatggaggc atagnactgg 120
                                                                    152
ggagggaagt tttgaaatgg gctcaacaga aa
<210> 3806
<211> 414
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (248)
<223> n equals a,t,g, or c
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<222> (297)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (356)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (359)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (379)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c
<220>
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<222> (400)
<223> n equals a,t,g, or c
<400> 3806
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accaccaget tetecactee tataacceat gtgccettte aagceteggg geetttgeag 120
ttgctatagt ctctatctgg aatgcccttc ccccagttct tcccatggct gactcctttg 180
aatctttctg gtgttggcta aactgtcacc tcttcctgga acccttctct gaccatcctt 240
ccatgtanat tagctcagtt attctcacct tgtgtgtctt tttccttgca gtttagnact 300
cattaccatc tggacatatt ttacgccttg ctctcccact gtgaggacag ggaccntgnc 360
tttcttgctc gagactgtnt ttcccancat ctattgcagn gcctggtatg cagt
<210> 3807
<211> 407
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (145)
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<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (320)
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<220>
<221> misc feature
<222> (332)
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<220>
<221> misc feature
<222> (367) .
<223> n equals a,t,g, or c
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<222> (385)
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<221> misc feature
<222> (393)
<223> n equals a,t,g, or c
<400> 3807
gggttanttg taaaaaccac gttaatgttt ctgagctttt ataaaacata tcaaccaatg 60
tgtagacctg caaaagttga aataggtgta taatagactt tttattagtt tggtattgta 120
atagateact cattigtatg tattnigeat tetanicata tgattataag taattitigti 180
tataagttta taagtaattt tgtacaagta aatttaaact ttaacaccat gttaaaattt 240
cagaagccag aaaagaggga gatgcagtct tatatttaac aacttaaaac agtttaaatc 300
ccatgtagtt atagactgan ataaaacaaa gnatttctct tggcagtaga atccctgtgt 360
tctgtgngtg tggaacatat gttcnagagg gcngggacta tgtcttg
                                                                   407
<210> 3808
<211> 73
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<400> 3808
gctagaatat tactgtggat cccntaaaga nngactaatt ggctctgnat taatggagac 60
                                                                   73
ttcccactgg cng
<210> 3809
<211> 406
<212> DNA
<213> Homo sapiens
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<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (27)
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<222> (38)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (39)
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<221> misc feature
<222> (198)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (322)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (339)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (403)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (405)
<223> n equals a,t,g, or c
<400> 3809
ttnntagaga geteetttgg aagaetneta tagggaanne tggtaegeet geaggtaeeg 60
gtccggaatt cccgggtcga cccacgcgtc cggttcttta taaagtaaaa gtatacgaaa 120
ctgacaataa tattgtggtt tataaaggag aatagctatt ggggttagca ttgcacaaag 180
cccagtttct ttctgtgntt gaaaaagatt ttgatcccct tggaatatta agaggtcaac 240
acgtgattgt tgtacgtaca cattgtgctc tggagtgcct atttattgaa atcattgtaa 300
gacctgttat aaattttaag tntatttaaa actaaactng taatatacat cctgaaaatc 360
attttataga gtcttttatt tagtaangta aaaaaatcaa ttnant
<210> 3810
<211> 220
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (192)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (206)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (212)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (213)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (214)
<223> n equals a,t,g, or c
<400> 3810
ctcctcttgc agctgtcatc caccaggcac cccccttgct ccccgaacag ctgctaaggg 120
gggtgacaga tnaactgggt ggaaanctgc cnnncttgca
                                                        220
<210> 3811
<211> 127
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
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<223> n equals a,t,g, or c
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<222> (74)
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<221> misc feature
<222> (75)
<223> n equals a,t,g, or c
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<222> (116)
<223> n equals a,t,g, or c
<220>
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<222> (127)
<223> n equals a,t,g, or c
<400> 3811
nttgtagaga ccccatttgg aanaccnctn actataggga aagctggtac gcctgcaggt 60
accggaccgg aatnnccggg tcgacccacg cgttcgaaca agggcaagga gacctncctt 120
                                                                   127
tgagctn
<210> 3812
<211> 299
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
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<222> (18)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
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<222> (184)
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<222> (250)
<223> n equals a,t,g, or c
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<222> (253)
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<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
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<222> (267)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (277)
<223> n equals a,t,g, or c
<400> 3812
aaacccctna ctataggnta agctggtacg cctgcaggta ccggtccgga attcccgggt 60
cgaccccaaa aaacttgatt agggtgatgg ttcacgtagt gggccatcgc cctgatagac 120
ggtttttcgc cctttgacgt tggagnccac gttcttaata gtggactctt gttccaaact 180
ggancaacac tcaaccctat ctcggtctat tcttttgatt tataagggat tttgccgatt 240
ttggcctatn ggntaaaaaa tganctnatt taacaanaat ttaaacgcga attttaaca 299
<210> 3813
<211> 285
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
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<222> (136)
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<222> (241)
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<221> misc feature
<222> (276)
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<222> (281)
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<222> (283)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (284)
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ganacccctn ctatagggna agctggtacg cctgcaggta ccggtccgga attcccgggt 60
cgacccacgc gtccgatttc atattaaatg ttatataaca caagagagag aaagtataag 120
tagaaagagt gcctancacc ctaagaaatt taaattaaaa tgctaattat ccattggtga 180
gtgcagtctc gaggataggt gagtaaactg ctctgtgttg aagtcacact gctgacctgg 240
                                                                   285
ntattgtaat aaatcacctc tttggttaat ttaaanaatt ntnnt
<210> 3814
<211> 107
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (51)
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<220>
<221> misc feature
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
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<222> (91)
<223> n equals a,t,g, or c
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tacagaggat cagtggtgna ggacgcacac ctggactggg cagcagcgag ngagaaggat 60
cgangatngg agcagtgtga aaaggatgaa ngaaagattt ggggata
<210> 3815
<211> 123
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
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<222> (77)
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<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
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<222> (117)
<223> n equals a,t,g, or c
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tatntgaccc ntttggaatg ccggtacgcc tgctgtaccg gtccggaatt cccgggtcga 60
cccacgcgtc cgctgangca tattgtgcac aaaattgggc ncatnacgnt gactgtnacc 120
                                                                   123
atg
<210> 3816
<211> 506
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
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<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
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<220>
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<222> (148)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (219)
<223> n equals a,t,g, or c
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<222> (225)
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<222> (285)
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<222> (292)
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<222> (311)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (316)
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<222> (327)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (361)
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<220>
<221> misc feature
<222> (410)
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<222> (415)
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<222> (438)
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<222> (461)
<223> n equals a,t,g, or c
<220>
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<222> (477)
<223> n equals a,t,g, or c
<400> 3816
gnctgaatga tggnagntta agtctgagtt ttactgngag ttaaaaccct ctgaatttcc 60
agatgataat tccattttta atccatttgg aatgctgaaa gctacaaaaa tgnatttcct 120
gtcngtaaac atttgttgct ttattttngt gtttaattaa nagtttattt ttccccttta 180
aatctttgaa ggaaagaagg attttttgct tttttgttng ttttngtcag aatagttcat 240
ggtaaacttt gcaattacag atgatagttg aaaaaaaacc ccagngacgc antcgtagcc 300
gcaggcgtng nttcangggt caggcanaag atagacagcc aggtaacttg agtggacctg 360
nggacaccat cagggtcaca agcatgaaaa aaatgctatg ctgctttctn aatanattat 420
acttacatgt acacatgngc catatcattc aaaaattgca ntgcataaaa tggttantca 480
                                                                   506
cctaataaga ctctctatta ataaaa
<210> 3817
<211> 152
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (20)
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<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
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<222> (60)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
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<222> (140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c
<400> 3817
gtgggaaacg ctattntctn agggacgntt tcccgtttat atgacaagag cacaggggcn 60
tggccggaaa aaccaattan taggaccacc tttcttccct tggattggac ttccgacang 120
                                                                   152
ggtccttcaa ttnggataan ggccaaggtt cn
<210> 3818
<211> 252
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
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<222> (61)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (103)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (116)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (141)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (144)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (219)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (230)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (234)
<223> n equals a,t,g, or c
<400> 3818
ccggngcgac ccacgcgcgn ggacctatan aggaattgtg agtaagagaa taaaaggtgt 60
ntcaggggaa ctctaacttt cgggacccac atgcacngca gnncatacct cccatngtgg 120
ccagatatgt cgcggattgt nccncagaca tggcaccaaa ggatagcctt gaaggaggag 180
ctcattggat gccagattca caaggtaatg attcattgng agtggtgcan cganaagtca 240
                                                                   252
gagcaccagt tc
<210> 3819
<211> 135
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (125)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<400> 3819
ctntggaacg cctactatag ggaaagcngg aacgcctgca ggtaccggtc cggaattccc 60
gggtcgaccc acgcgtccgc ccacgcgtcc gaattcacat aatgccaaat acacaatgtg 120
                                                                   135
aattnggcga nnnan
<210> 3820
<211> 414
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (244)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (356)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (367)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (380)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
<400> 3820
gatttctctg gatanatctt tatatgctag tcattggtga ttttgatgag tcaatttaca 60
gactgtaatc ttctaaaaat tctgaaagac taattgtttt ctgtgccata taaatgcata 120
ccactgagca aatgaacctt attctcagca ggaacaacta gcatacatgt tctgaattct 180
aacagtgcta aattacattc aagtccagga agatcacctg gaattaatgg catttcagtt 240
ggenggcate atteceacce eteggtetta ggaaaaggag gtagaagece ecagaaccae 300
acggcagaga tcancaagtt ttgtctcaag tcagacaagg tctangtggc cttggnctta 360
tgcaaantgg gtgacatatn ggantatatt tccctttacc tccatagagt tcag
<210> 3821
<211> 147
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c
<400> 3821
gtataagcct ttattccaag aggtatttat gctaatatgt gccataaaaa agtagagttt 60
taatatttga caaaatgtnt gtgcaaagaa acaaatgcat aaacacatta ctgctacatt 120
aaggcatttt gnaanctgga canctan
                                                                   147
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<210> 3822
<211> 76
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<400> 3822
gggattgaga gacacacaca gctggtcaag tagacgtnta cnggnnacca tttgaatatt 60
tnatccatga atcatg
<210> 3823
<211> 437
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (382)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (423)
<223> n equals a,t,g, or c
<400> 3823
gacctcatct gcctggggcc tnacctgctg gagtcctttg tggccaaccc tctctcttac 60
ctgggacctc acacgctggg cttcacggct gccaggagcc tctcccctcc agaagacttg 120
cctgctaggg acctcgcctg ctggggacct cgcctgttgg ggacctcacc tgctggggac 180
ctcacctgct ggggaccttg gctgctggag gctgcaccta ctgaggatgt cggcggtcgg 240
ggactttacc tgctgggacc tgctcccaga gaccttgcca cactgaatct cacctgctgg 300
ggacctcacc ctggagggcc tgggcctggg gaactggctt actttggggc cccaacccgg 360
gagtgatggn tctggcttga antggtttgt gaagttggta gccnctgtta aagggtgcan 420
                                                                   437
aanagatcat tacggta
<210> 3824
<211> 345
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (325)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (333)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (335)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c
<400> 3824
cncgggatta angggggaat ctaatggaag ccttctggna cncttgcngg taccggtccg 60
gaattcccgg gtcgacccac gcgtccgcaa cagaaagatg gggctgtccc anccgtaagt 120
caggetegag ggagaetgat eccetgaeca atteacetga taaactetag ggaeaetgge 180
agctgtggaa atgaatgagg cacagccgta gagctgtggc taagggcaag ccccttcctg 240
ccccacccca ttccttatat tcagcaagca acaaggcaat agaaaagcca gggttgtctt 300
                                                                   345
tatattcttt atccccaaat aatanggggt ggngngaggg gcnng
<210> 3825
<211> 439
<212> DNA
<213> Homo sapiens
<220>
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<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (95)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (409)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (411)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (416)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (419)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (439)
<223> n equals a,t,g, or c
<400> 3825
ttaacggggn aaatttcnta ggccattctg gtacncttgc nggtaccggt ccggaattcc 60
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cgggtcgacc cacgcgtccg cggacgcgtg ggcgnacgcg tgggctgagg ccagcatgag 120
ctctccacag gggacttgtt tggggcagac atctgtagtg gctcttgagc cactgggggc 180
cctgggattg gggcatgggc agtagctgat tccccttcac cccatcctct ctggcattgg 240
caggtcagtg cacaatgaac tggagaagcg caggtgagtc ccagtcctgc cctgacagcg 300
ccagcccca ggggccactg ccctctggcc ttccctcccc tgccattcct gtggccggca 360
aggtggggct ggcactgcct ccagacctct tcccacagga aggcccaant naaacnggng 420
ctggaagcgg ttgaagcan
<210> 3826
<211> 127
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (116)
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<223> n equals a,t,g, or c
<400> 3826
cgggacttna angggggtan actaatggga aagctcatta tagggaatnc tggnacgcct 60
gcaggtaccg gtccggaatt cccgggtcga cccacgcgtc cgactagnag nagatngcga 120
                                                                   127
gcggtcg
<210> 3827
<211> 362
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (282)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (337)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (353)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (361)
<223> n equals a,t,g, or c
<400> 3827
tntaacgggg ggaangctat tgggaaggcc attctggnac ncttgccggt accggnccgg 60
aattcccggg tcgacccacg cgtccgagaa aaaggaagag ggttgggcac cgtcgtgaaa 120
tggtacactt cctcaccgcg gtgcttatct acataattgt gtttttataa catttccttt 180
acttttctgt aagctgatgc tgccctaatt atagattntt aagagaacac ttcattgtac 240
cccaaattat acagtgcttt aaaaaggtac tttcttaccg gnttaccaaa taccttataa 300
attcgaatta cataaaacaa ttcgagatac anaatanaaa cagcctgtac tgntaacagg 360
                                                                   362
ng
<210> 3828
<211> 239
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (127)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (157)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (206)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (228)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (229)
<223> n equals a,t,g, or c
<400> 3828
gaaaaaattt atttgcattt atgcctttag gataattttg tatctttcta atctgtttta 60
tcattgctac aggtttttaa aaaagaacct ttcactagct agcacatgcc agaggttcac 120
atctgnnttg nttntcaaac aggtcgtagc tgtattnatt ggccatgcaa gtagaggaaa 180
tgcacagtac aaatgttttn ctttancacg taagggacct atccttgnnt tgaaaagtg 239
<210> 3829
<211> 56
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<400> 3829
gcttgnataa agnattggnt tgganttgga aaattaaaaa aaggtttcan tttaac 56
<210> 3830
<211> 564
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (517)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (547)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (555)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (558)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (560)
<223> n equals a,t,g, or c
<400> 3830
cattttggag gcagtgggtc aaacaggnaa agccaatgna tgngtgncat tttaaagtgt 60
cggaattaan cetetgaata cettetecat tgggggaaag atattettgg aaccacteat 120
gacatatett agaaggteat tgacaatgta taaactaatt gttggtttga tatttatgta 180
aatatcagtt taccatgctt taattttgca cattcgtact atagggagcc tattggntct 240
ctattagtct tgtgggtttt ctgtttgaaa aggagtcatg gcatctgttt acatttacct 300
tatcaaacct agaatgtgta tatttataaa tgtatgtctt cattgctagg nactaatttg 360
cagatgtctt tacatatttc aatacagaaa ctataacatt caatagtgtg ctgtcaaagt 420
gtgcttaact cacctggata tacctacatt ggtaaatgct aaacagtaat cattaaaaca 480
tttttgatta aaaaaaaaa aaaaagggc gggccgnttt aaaaggatcc aagctttacg 540
tacccentge atgenacngn cata
<210> 3831
<211> 637
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (461)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (558)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (569)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (597)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (614)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (628)
<223> n equals a,t,g, or c
<400> 3831
ggggaccaaa gaggccatag tgcccatgga ggtttggact taagagatat tcattggcag 60
ctcaaagact tccacctgg agaccacact gcacacagtg acttcctggg gatgtcatag 120
ccaaagccag gcctgacgca ttctcgtatc caacccaagg accttttgga atgactgggg 180
agggctgcag tcacattgat gtaaggactg taaacatcag caagacttta taattccttc 240
tgcctaactt gtaaaaaggg ggctgcattc ttgttggtag catgtactct gttgagtaaa 300
acacatattc aaattccgta taccaaaatc catttccttt gtaacaagaa tttaccagta 360
actgtgatct aggttgccaa aagttgtctg aatctcctta ttcttctctg atcttcattt 420
atgcagccaa tgtctagctg gacctgccct catcttgcag ntcatacagg cactgtttga 480
gagattggtt attattagat gttgtaatgc tgcttcaaga ttcttcatgg ttacatggga 540
tgcccctgct catctggncc tgaaagtant aacattcacc ccaatgaggg atatagncat 600
                                                                   637
taattccttt ttcnagttac ttgtaccnaa acaccgg
<210> 3832
<211> 488
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (99)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (234)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (263)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (269)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (415)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (435)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (470)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (481)
<223> n equals a,t,g, or c
<400> 3832
ggcccctgcc cgtaccggtc cggaattccc gggtcgaccc acgcgtccgg aataatttat 60
aatggttatt tattggaggt ggtaattagg gaagatgtnc ttttaaacag tagaattgtg 120
ttacaaaggg gtgaaagaga gggaatagtt gctccttgtt gaagggcatg tgaaggtagg 180
tttcaggttt ggttttacaa acctgttaac tacctcctgt ccagcttgac aganactaat 240
ttttcatctt tttgctgtca atnngttcnc agaaaagaga cttttccctc tcttgatagg 300
atctgtctta gggacanagg gaccatcgtc tttaagtgaa ttaattattg atggttcana 360
atggttttca tcatnttggg atcagctata tggcaaatag gtatcatcaa tgagntaacc 420
atctaaaaat anaanaagtg gaagccctaa aatgctagga ataataatan aaaggccaaa 480
nataaccc
                                                                   488
<210> 3833
<211> 436
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (2)
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<222> (19)
<223> n equals a,t,g, or c
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<222> (37)
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<222> (98)
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<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (195)
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<222> (297)
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<220>
<221> misc feature
<222> (305)
<223> n equals a,t,g, or c
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<222> (311)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (313)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (356)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (361)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (401)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (403)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c
<400> 3833
nnaattcaca ctgaaacgnc ctactatagg gattagnggg aacgcccgca ggtaccggtc 60
cggaattccc gggtcgaccc acgcgtccga ttacattntc tcccctgata atctcttcta 120
aattaccttc tgtagttggt tntcttccct tccttaatgt tagccattct tcaggtgaag 180
gttaatcctc aatgnactct tcatgtttaa ggggagggtc taaaaccttg ggggtaggac 240
ttaccaacgg agtttcattg catgatgatc ttattgagct tattggtagc ccttatntca 300
gnatntaaag ntnntcttgg gctggtcaga tnttcaagag aagacttttc atttcntttg 360
nggagggaaa aggcctttta ccagcactct tcaagctcag nangggaaag acttcaagca 420
                                                                   436
ctcaggaagc angcat
<210> 3834
<211> 115
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
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gcctagtnat agggcagtga ggaatcaggn ctactatgga aanagtcaca taacggtctc 60
ttcaaactct tacatgccnt nacctaagat gatcaccact cactgcgant gtctc
<210> 3835
<211> 69
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<400> 3835
tttaaggggt gggaaccccg gccccggga caggngacac gcggggccgc ggaaatattc 60
                                                                   69
tccgggggg
<210> 3836
<211> 66
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (62)
<223> n equals a,t,g, or c.
<400> 3836
gcctttaaaa acagaacctt ttatacaggt ggattttcat tcctctgggg acagnggnng 60
nnaaga
<210> 3837
<211> 52
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<400> 3837
                                                                    52
gageneaatg aagateaaga teattgetgg gtgegtgntg cattggngne nt
<210> 3838
<211> 314
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (305)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (309)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (310)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<400> 3838
ggttttttct tattgctgtg gaacctcttt tggaggacgt taaaggcgtg ttttacttgt 60
ttttttaaga gtgtgtgatg tgtgttttgt agatttcttg acagtgctgt aatacagacg 120
gcaatgcaat agcctattta aagacactac gtgatctgat tgagatgtac atagttttt 180
tttttaccat aactgaatta ttttatctct tatgttaaca tgagaaatgt atgccaaatg 240
314
aaaananann aaan
<210> 3839
<211> 181
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
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<220>
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<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (125)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
<400> 3839
tcaactncta ctagggggg gaaaaaaggc tntgggttta ccggcnctnt ggccaagggn 60
ttacccgggg tttccccggg gaaaattttt cccccggggg gnttccggaa cncccaacgg 120
gccgnttccc cggggttggt tggaaacntt aaaggtttta tttttggctt tggccattan 180
                                                                   181
a
<210> 3840
<211> 458
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (423)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (450)
<223> n equals a,t,g, or c
<400> 3840
gcggactaag acaacaagga tgaagtgaag catcctggat atcctctgcc tgtaatccgg 60
tctgatgtgc ggcacttcat gtccgagctt atccatttgg ttttggtctt tggaaaagac 120
aacgttagtc acttactagt ggcagttgca tggagaagag ggctcactaa tgggggacag 180
ggtgatcatt tggagtttgc aagctgtgaa gacagatgtt ggctcttcac aattttggaa 240
gggttcacta gttaagtgta ggaccttatg ggggatggaa ataaggcaga ggcatagttc 300
tggccactga gttccttaag gtctgctgaa ggctgccgat gcgtctctca ctccctcgta 360
tgctctggag canaccaggg gctggaggaa tganggaaga tcctttcatt aaccaccatn 420
                                                                   458
tgntgacatt tttctttgtg aaaacatttn tattatat
<210> 3841
<211> 498
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (459)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (465)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (480)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (493)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (498)
<223> n equals a,t,g, or c
<400> 3841
gcagtggtgc agttctcggc ctctcggcct ggcttcctga ccttctggga ccagtgcaca 60
gagagactca gctgcttcct ctgcccggtg gagcgggtgc ttctcacctt ctgcaaccag 120
tatggtgccc gcctctccct gcgccagcca ggcttggctg aggctggtga gtgggctgct 180
tecteettee accettgete agatteeeag tgacaggaag eteggggaag ceaggteage 240
ccacacagat aaacgaactg ggcaccgagg agaccagcaa agacttgggc cttagagcag 300
aaggacccag atgggtgggg tttgaacagg gggcccctgg acctgagcct gggataggag 360
catctctccc ctctaaaagc tgtgttcacc caaactctga ggcccatgct actgcctcct 420
gcagtgtgtg tgaagttcct ggaggatgcc ctggggcana actgnccaga aggccccaan 480
                                                                   498
caagggcctg ganagcan
<210> 3842
<211> 98
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (96)
<223> n equals a,t,g, or c
<400> 3842
gaacactgca atgctataca tctatgctgt gttgcttgtt aaatcnaggc actgcagtat 60
tangcatgca catgattntt tctgagaatg angaanct
<210> 3843
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<211> 63
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<400> 3843
gcggacgct gggtggcact gaggagctat ggggccacaa ncagtantna ctggctnntt 60
                                                                    63
tcc
<210> 3844
<211> 65
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<400> 3844
gacggacnca taggacctnt aatctttcat cacagntcga naggcccacc tgtaccgtgn 60
tattt
<210> 3845
<211> 76
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<400> 3845
gaaaaaaaac antnnacaat gaaaatattg agaagatatt gagaaagaaa tatatttggg 60
gcggacatcn atgnga
<210> 3846
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<211> 187
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (176)
<223> n equals a,t,g, or c
<400> 3846
ttaattncca ngaacttatt tagggcattc cctttcnacc atggncaacc ccattgccct 60
tacggacttt ncaaagggat tagaatttct tttccttttc ttaattcagg ggggacaatt 120
enggetttte caacanetee ttgettgee gettgneage agecaggean gtttengatg 180
                                                                   187
aatcaag
<210> 3847
<211> 68
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<400> 3847
gctgggaaca agccngagct gnangangaa gagaagntgt acaagaacgc ccgggaaagg 60
                                                                    68
gagaagta
<210> 3848
<211> 235
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (11)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (161)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (190)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c
<400> 3848
gcgcccgccg nnagggccgc acgaggcccg gcgtgcgccc ccgcctctcc cgaagcgccg 60
ggccccacgc cgccctcct ttccctttcc gctctctccg cctccggaag cgcgggcgcg 120
cggcgcggg agcccgttca gggccgcggg agtgcgccag ngccgngcgt ggggctgagg 180
tggccgnggn tctcagatat atttttgcca tcatgganca gtttggagat atatt
<210> 3849
<211> 71
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<400> 3849
gctttgctgc tangtaggca tggattatta tgctgataca tagagctctt ttgatgataa 60
                                                                   71
nnngattnta a
<210> 3850
<211> 76
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
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<400> 3850
ggggagaagt gcccctgtt gaagctcttt gtgacgggcg agntcanngt ttttgatggg 60
tgactgncca nacttc
<210> 3851
<211> 63
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<400> 3851
gcaatgtccg ccagaaggnc aggcnagccn agccntgccc tcaggcggag antggtctgt 60
                                                                   63
gac
<210> 3852
<211> 349
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (188)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (303)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (318)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (349)
<223> n equals a,t,g, or c
<400> 3852
gtcatcatct atccccttta taaatgaact acactgttgt ttttctgact tcgatgtgct 60
ttgaagtaca gtgtagcata tcattctacc ttgaatccta tgataataca gttgacatct 120
tgctgtagtg gacttgtgca tatagcacac atgatatagt atattgtatt acagtaaact 180
ttagacantg ctacttaatc attttacttc atgaagataa actancattc taaatatgaa 240
taatattaat ggtctacaaa aaattttgag cacattttan aatcatattt ataataaact 300
                                                                   349
ggncaaattg ggcttatnta atgtataatt tagaacccac tgtgtagnn
<210> 3853
<211> 129
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<400> 3853
nttgaccann tgtcacacat gatatagtat attgcattac agtaaacttt anacaaatgc 60
tacttaatca ttatacttca tnaagataaa ctaggcctgt caaatatgaa tatnnttaat 120
ggctacana
<210> 3854
<211> 200
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
```

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<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (173)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (198)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c
<400> 3854
ggaaatattt aaaggttgaa aattataatn acctataaag ctgtgaaaaa tagaagtata 60
atntgaaaaa acatttcact tatcagagat tnttatattt atacaaaaga ttactaaatg 120
aaggattgct aaatgntttt ggntcaatta cataaaaatt aatattctgg gtntgatctg 180
                                                                    200
ggagagaata aatatganan
<210> 3855
<211> 456
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (176)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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tatatacact gcctctagga ctgggacana tagccactga gtacctgctt caaatcaccc 120
tgcacgtttt ctctttggaa agataagcac tggagaacca tcttcgttac cttcancaga 180
aatggaaaca attcaagaca ttaagaatgc cgnaantgga cagcagctat gcanggttca 240
gnatatgaag ttttcaagat ggtgtgcctc actaanceng aaatcangaa aagategaag 300
ctagcctntt tnatctcagc ntgctcctta aatcangnca acnccctcca aaattaattg 360
tgaatctgaa acctttgcca ttngcttttt caaactttaa attgganata accttaactt 420
                                                                   456
attntgntga aacccacntt gccaccataa aattat
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<212> DNA
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tccaaaattc aattattaaa gttttngggg g
                                                                   91
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<211> 510
<212> DNA
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<222> (505)
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gatattaaaa actttttta tgtagatgtt acagttaggg gattaccata tttgtttttg 120
aaqaatgtat aggctaaqaa atgcctctca cgtatacata gccaaaagct tttcttggct 180
tcagattaat gatttctgat gtaacatttt ttaatgtaaa cacaaaaaat gacttgatat 240
tttcttgtta ctccatttat ttcttaatga ttgcatttca tgtttctaat tttctaagta 300
aattataatt acaaattagc cttgtattaa aatatagggc tcaaaatatt ttctgnggtt 360
ctctttggtc ttcatgccaa gtttgncaat ttatattctc tcagtgatta tttggntatt 420
tttagnggta gntggtattt atcaagtggt aaactatgaa tacctncatt tgctatttga 480
gaaaatgaca ctcatttaat ctaantaaaa
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<222> (552)
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aaaactccct tctgccccac cctgccccct ccacttcctg ccctctgttc catcttcccc 120
cttcccaaag gccacagcct ttattccagg cccagggatg taggaggggg aaggaggaaa 180
caggaagccc agagaggca aagggcctac ctcggggcgc gaaccatgcc ccagactatt 240
atctcagggc tttctgggca ctgacttcag cgtggccacc tgcccatgcc ctgaggccag 300
ttggcgaggg gtggtcctga gggtttttat accctttgtt tgctaatgtt taattttgca 360
tcataatttc tacattgtcc ctgagtgtca gaactataat ttattccatt tctctctgtg 420
tctgtgccaa gaaacgcang ctctgggcct gcccttgccc aggaagcctt gcagctgtgt 480
gcttgtggga acacttgacc tgacttacan gnaccaataa agagntttat tttaaaaaaaa 540
                                                                   552
aaaaaaang gn
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<211> 60
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<223> n equals a,t,g, or c
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<210> 3860
<211> 602
<212> DNA
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<222> (402)
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<221> misc feature
<222> (432)
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<221> misc feature
<222> (580)
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<222> (581)
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<221> misc feature
<222> (598)
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<222> (599)
<223> n equals a,t,g, or c
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acagcacttg ggcctttgcc agcagcaaga ggtgaagcga agccactctt acctctccct 120
tcccctccca cctgcccct gcgtaggcac ccagacttgg agagacccgt ctgctgttaa 180
tacttccatc ctcttccttc ccaaagagca gatcccaagg catttactcc ttggtctgtc 240
tegetttate tgtegeeet eccagegetg agageeteee etggetgtea geageactgt 300
gtccaggctc ttgtctgaac accgcagccc ctccttcgct ccttccagag ctcagcatgt 360
cacggcaagg actgccgcat tggtgatgga gggccanctg angggaagtt gctggtgaag 420
tttccttttc tncatttcta gcatatggac acctggcctc tgcttgaaca cttangtgac 480
aggaacttcg caccttctga ngccctggat gattctaatt ggtagaaatt ctaattggta 540
naaatcttcc ttataatgaa tgaatctgct ttctataatn ntacctattg ggccttgnnt 600
                                                                   602
gg
<210> 3861
<211> 458
<212> DNA
<213> Homo sapiens
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<222> (365)
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<221> misc feature
<222> (436)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (437)
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nagaaaactg agcctaaagg ttggcaggac aggaccttgt ctaggttcct tcaccatttg 120
cataaatttt tagttgatgg cattettta tttgaggget getttgaaag tgggttecat 180
gtettagtea tetttgggtt tettggggee ttacacagtg etggcataaa geageeetgg 240
aaataatgtt tgttcaaaat gtaagtggag tatagatttt cccttttggt agatagctaa 300
gaaatcette angggaacet ggaatgeete nttggtatge angtettgea gagettttga 360
ttgtnatttg aaataaactg ccctcgtggg gcnctgttct ttttgcaaat tggcttgaaa 420
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attgttgttn cncttnnaat ttagctccat tttcccaa
                                                                   458
<210> 3862
<211> 411
<212> DNA
<213> Homo sapiens
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<222> (43)
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<222> (254)
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<222> (383)
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<400> 3862
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cctcctgaga angaaangat ctgccctgan cactcccctg gcactgttnc tngcctctgc 120
gcctcaaggg tccccttctg caccgctggc ttccactcca ataaagtgga ccanggtctg 180
caagttcaac ggtcatagct ttccccccat gtcccaactt gcctcatcac tcccggccct 240
aatctctcca nnnnnnncc ccnngcctct tgggctcana ccccaactat tcaagggatc 300
tectgetett aategataat tgggggteee tgeteteeee aagaanatet etteaagaaa 360
ataaanttna ccttttnctt ccnaaaaaaa aaaaaaaggg gggggccccc c
<210> 3863
<211> 566
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<222> (477)
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tgcactcatt ttgtatagtc taccaaggcg ggtatcccta ggaacaatat tatataggaa 120
gcaggtatac tctgatcaca ttcaggataa gtgtacagaa gaaaatacgg tgtttactct 180
ttagggaact ggaaacactc cctgcattga tgttacattt taagaatggc acttttgata 240
catgttatca taaaggtgct taatagactt gaattaaagt ttttccaaat ctgtaaacaa 300
agcaaaaaat taaattgtaa tcatttgatt attttttaaa ttggtgcttt atatttngtt 360
tctcctccan aattaaaanc tgcaatttat tgttccccca gcttttgaag ttttttcctn 420
tactcaanta atgccaatan ctcccattgg tttgaaattc ccccttttng ggaaatnaat 480
tttaaaaatt ccctaaccgg gccacttgaa aaacctgccn ccgcctaagg ttttttggct 540
                                                                   566
ttgggttggg aaaaaacat taatcc
<210> 3864
<211> 259
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (213)
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<221> misc feature
<222> (233)
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cccancnccn tggntgagna atgcctngct gctgnangtg tattggacct nnatattgca 120
ttactagagg tnctgaagac tgccctcntc cacnatggcc tatcacgtgg aattccccaa 180
gctgccaang acttatacaa atncgtgtat cantctcaat actgtgggtt ctngcaacac 240
ggaaccaaac tgccnccca
                                                                   259
<210> 3865
<211> 232
<212> DNA
<213> Homo sapiens
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<222> (10)
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<222> (139)
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<222> (220)
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<220>
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<222> (227)
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agtatcatag ttgtacattg gtcacaaatc ctgtcagtgt ctgggttaat ataatacagc 120
tnnggaccnt gcgtctgcnt ccgatgtagt ctatggaaat gtgttgtttc aattgaactg 180
taacangaaa atctggcctc acccatttta tagttganan acggaanagg at
<210> 3866
<211> 126
<212> DNA
<213> Homo sapiens
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<222> (2)
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<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (72)
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<222> (108)
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<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
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<222> (125)
<223> n equals a,t,g, or c
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anaaaaaggn catctgccta aanataaact gctagctctc cgaaagccct gagggcctgg 60
cttgtgtgaa cntataaaan aatggtggcc gcgctgtgcc tgctcatntt gcctacatgt 120
                                                                    126
cccnng
<210> 3867
<211> 315
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (301)
<223> n equals a,t,g, or c
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<222> (304)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (312)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<400> 3867
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gggagatgga gagaaagatt tattttgtan agtctttggg tggaattgtg ggtatactgt 120
tcccttcaca attgactgag tatggataac cgtacataan catttgctac accccaccag 180
cccctcccc ctcagaaaca ccagttcctt cccaagggca gctgtgccag actcccctcc 240
cgggactgcc ttcttgtcat cataagcaaa aaaaaaaaag ggggggcccc cccaaaanaa 300
                                                                   315
naanaatttt tntna
<210> 3868
<211> 309
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (207)
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<220>
<221> misc feature
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<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (250)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (265)
<223> n equals a,t,g, or c
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gccccaaaaa ggccttcctt taaaattncc cccggaaact tttctaacct taaataaaaa 60
gggggggaa aaaaaaggcc tttggggggt ggaaccencc cccctttggg cccaaagggg 120
gtttaaancc ccggggggnt tcccccggg ggnaaaaann tttccccccc cccggggggg 180
ggttttcccc gaaaaacccc ccccaanacg ggcccgggnt ttttcccccg ggtttggggn 240
ccccccccn ttttttgggg gtntntcccc ccccccca aaaaaaaaaa aaaaaaatt 300
                                                                   309
ttttgggtt
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<210> 3869
<211> 356
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
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<222> (37)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (167)
<223> n equals a,t,g, or c
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<222> (179)
<223> n equals a,t,g, or c
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<221> misc feature
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 <223> n equals a,t,g, or c
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 <222> (200)
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 <221> misc feature
 <222> (212)
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 <222> (218)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (219)
<223> n equals a,t,g, or c
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 <222> (222)
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 <221> misc feature
 <222> (277)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (284)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (286)
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<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (338)
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cctatttcac atacaacaga tcttttaccc ccattctgtt agtaataaca atctcgcccn 120
cccatcctat nanacctgta ccactcagga aggatcacga ccaaatnagt atagggttnc 180
ttctntnaac tttctgtatn acatccgaac tnatgatnnc ancgggggtg gtgttggcag 240
ttggaattgn gggcctcgag ctggctgcca tgattgngtc catntntcta ttactgcaat 300
ctacaangaa teegettaet geetetgeea etaatggntg eeeeetggg aactet
<210> 3870
<211> 550
<212> DNA
<213> Homo sapiens
<220>
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<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
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<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (92)
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<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<220>
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<222> (117)
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<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (181)
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<221> misc feature
<222> (196)
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<222> (299)
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<222> (302)
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<221> misc feature
<222> (362)
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<222> (418)
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<221> misc feature
<222> (446)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (461)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (497)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (502)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (525)
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<221> misc feature
<222> (545)
<223> n equals a,t,g, or c
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<222> (550)
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aaaagngggg gaaaaaaaag gccttggggg tnggaccccc ccnccttggg ccaaagnggg 120
ttaaaccccg gggggttccc ccgggggnaa aaattttccc ccccggggg gggtttccgg 180
naaaccccc caaccnggcc cgggttcccc cgggaaaccn ccaaaaaaaa tttttaaaaa 240
ggnaatttgg gggtttaaaa aggaaacccc cttcccttgg gaaaggnaac ccccaaaana 300
cnaaccaaaa accettggge cetttttaac ecaaggnaaa aattgggggg aaatteenaa 420
```

```
ttgggtttcc cccccccc tttttnaatt tggtttttgg naaagggggt tgggaaaccc 480
caaacctttt ttaaaanttt tnggcccttt ttttccccct ttggncccct ttcccccttt 540
ttggnaaaan
                                                                   550
<210> 3871
<211> 277
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<222> (241)
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<221> misc feature
<222> (251)
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<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (275)
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getettetea ttteacccet ccetttetee cetgeeccca ggaetgggee acttetgggt 120
ggggcagtgg gtcccagatt ggctcacact gagaatgtaa gaactacaaa caaaatttct 180
attaaattaa attttgtgtc taaaaaaaaa aaaaaagggc ggccccncta aaaaatccaa 240
ncttactttc nctttcatgc aacttcatan ctctnct
                                                                   277
<210> 3872
<211> 550
<212> DNA
<213> Homo sapiens
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<221> misc feature
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (147)
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<221> misc feature
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<221> misc feature
<222> (230)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (254)
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<222> (257)
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<222> (288)
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<221> misc feature
<222> (311)
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<221> misc feature
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<221> misc feature
<222> (322)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (332)
<223> n equals a,t,g, or c
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<222> (344)
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<220>
<221> misc feature
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<222> (444)
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (453)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (480)
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<222> (497)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (502)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (519)
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cngccccaa aaagggcctt ccctttaaaa attcccccn ggaaactttt nttaaccttt 60
aaattaaaag gggggggaa aaaaaaaggn cctttggggg gtngaaaccc gcccccttt 120
```

3511

```
ggggccaaag gggggtttaa acccccnggg gggtttcccc cgggggggaa anaatttttc 180
cccccccgg gggggggttt nccgggaaaa cccccccaa accgggcccn ggttttcccc 240
cgggcccttt gggnggnttt aaagntttgg ggggcccccn aacccaanaa aggccccct 300
ttggggggcc naaggnccct tnggttttaa gnnaaagncc cccnggccct ttaaaaaccc 360
ccttnccccc ccgggaaacc aaccccttt ccccccttc ccaaccccca accaaaccaa 420
ngnggaaacc cccctttgga aagnttggna agnggaaagg ggaaggggg ggcttggggn 480
aaaaacccct tgggggnatt gnggggtttt gggcccaana aggggaggaa acctccaagg 540
                                                                   550
gctccttggc
<210> 3873
<211> 450
<212> DNA
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<222> (24)
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<221> misc feature
<222> (29)
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<221> misc feature

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<221> misc feature
<222> (387)
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<221> misc feature
<222> (411)
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<220>
<221> misc feature
<222> (423)
<223> n equals a,t,g, or c
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<222> (430)
<223> n equals a,t,g, or c
<220>
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<222> (448)
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ttccccccg gggggggttt ccggnaaccc ccccaaaccg ggccgggttc ccccgggaaa 120
gggggccaaa ttttccccc ccccttttt cccaaccaaa aaaccaaagg tttaaagnaa 180
aggnaaccc cttnaaccna accaanggtt tgggaaaaac cttttttttg ggggggggg 240
aaactttttc ccttgggaaa gnaaattccc aaggnccggg ttcccccttt aacccccaaa 300
aaggnaaacc ccccccaaa ggccccccc aaaaaccttt ccaaaaaggn cctttaaccc 360
aaggnccaaa gncccaaggn ccaaccnttt tccccccca aaaggncccc nttggccctt 420
ggnaaccccn aaccaaggtt tccaaccnaa
                                                                   450
<210> 3874
<211> 557
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (161)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
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<222> (250)
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<222> (316)
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<222> (318)
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<222> (354)
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<222> (362)
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<222> (424)
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<222> (441)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (453)
<223> n equals a,t,g, or c
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<221> misc feature
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<222> (465)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (485)
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<222> (515)
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<221> misc feature
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<221> misc feature
<222> (528)
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<220>
<221> misc feature
<222> (536)
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<220>
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<222> (537)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (554)
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<400> 3874
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agctgggagg ggactgaact ctggaggtgg ctctggagct ggatgtgaca ccaagcatca 120
ccagattggt ggtggaatgt gggggaagaa caggagccta ngagaacagt cccacccag 180
gcaggctgga gcacctgaat ggatagagga ngtcgttcct gaactgggca gcctgggcag 240
gacacanatn ttggaaatga aaccaggggt cctctgatac aggttacatt tgaaatgttt 300
gcaaaaatcc agttananat gtcaaaaaag cagttagatc ttgtnattct gaanctcatt 360
tnaaaatcca aaatagccca attttagttt ggttttctcc aaccttaact tattagggaa 420
tggntttgaa ttccctgcca naaagaatgt ttnacngaat tnaanaaagg atcccctaga 480
acaanttatg cttaatcccc ttttttgatg gtccnatnaa gaagaaanac cccttnngga 540
aaaaggaaaa accnggg
                                                                   557
<210> 3875
<211> 550
<212> DNA
<213> Homo sapiens
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ggggaaaaaa aggccttggg ggtgggaccc ccccctttg gcccaaggng gtttaacccc 120
ngggggttcc cccgggggna anatttttcc ccccggggg gggtttcccg gaaacccccc 180
caaaccgggc cgggtttccc ccggcnaaaa ggccctttaa tttccnttna agnnaaanna 240
aaggnccccn aaccaaattn cccccttggg ttttttaggaa aacnttggga aaaaaaaggg 300
ttggggggcc naatttggcc caanaaggna aattnaaaan aattttttt aaattttntt 360
nggneetttg ggttttteee eetttttggg ttteeettna accettggge eettttttt 420
ttnttntttt cccccccc ctttttgggt ttgggtttgg cccttgggtt tccnaaaaag 480
ntttttttt tggggggttt aatttcccaa ngnaaaaaaa atttaaaaaaa acccaatttt 540
tgggaaaaaa
                                                                   550
<210> 3876
<211> 101
<212> DNA
<213> Homo sapiens
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<222> (22)
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<222> (82)
<223> n equals a,t,g, or c
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<222> (97)
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catcgcccaa aaggcttcct tnaaatcncc ggaactttca acttaaataa aggggggaaa 60
aaaggetttg gggtnggace encecettgg gecaagnggt t
                                                                   101
<210> 3877
<211> 556
<212> DNA
<213> Homo sapiens
<220>
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<222> (398)
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<222> (442)
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<222> (446)
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<222> (467)
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<221> misc feature
<222> (517)
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tttctcccta ctgtcaaaaa aatatgcatg tatagtaatt aggacttcat tcctccatgt 120
tttcttccct tatcttactg tcattgtcct aaaaccttat tttagaaaaat tgatcaagta 180
acatgttgca tgtggcttac tctggatata tctaagccct tctgcacatc taaacttaga 240
tggagttggt caaatgangg aacatctggg ttatgccttt tttaaagtaa ttttctttaa 300
gaactgtcac atgttntttg ttgaattgtg gaatttgtta ctctgccttg gactatggac 360
agtcaacaat attttcttaa aaatttgcac tattgcanaa cgggtgttat tatccaaggt 420
actccttacc ctaatttttt tngttnctgc ctggtncccg ttacaanaaa cattttccct 480
tttaaattgg ttaccttgcc ttttttaaaa cttttgnttt taacccccct ttaaaaaatc 540
ctgcctttat tgggca
                                                                   556
<210> 3878
<211> 99
<212> DNA
<213> Homo sapiens
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<220>
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<220>
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<222> (85)
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<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (97)
<223> n equals a,t,g, or c
<400> 3878
aatanttttt angatttcgt agtcttttta attaaaaata agggttttgn acnccctttt 60
                                                                    99
ttttaaaaaa tgntcctttt ttttntnntg attagtntt
<210> 3879
<211> 289
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
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  <222> (95)
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  <220>
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  <222> (107)
  <223> n equals a,t,g, or c
  <220>
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  <222> (151)
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  <220>
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  <222> (287)
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ggataatatt tccataattt ttnatttgaa attttgctga ttcttnaaat gtnttgtttc 60
ccagatttca ngaaactttt tttcttttaa gctanccaca gcttacngca atttgataaa 120
atatactttt gtgaataaaa attgagacat ntacattttc tccctatgtg gtcgctccan 180
acttgggaaa ctattcatga agtatatata ttgtatggta atatagttat agcacaantt 240
caataaaaat ctgctctttg tattgcnctg attgtgngct angcacnga
<210> 3880
<211> 67
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<400> 3880
aggaaacttg tgcattacat ttttcctgat caagcaggna nggagcaana tgtncatata 60
tatttnt
                                                                   67
<210> 3881
<211> 144
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
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<220>
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<222> (23)
<223> n equals a,t,g, or c
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<222> (29)
<223> n equals a,t,g, or c
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<222> (83)
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<220>
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<222> (89)
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<221> misc feature
<222> (110)
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<220>
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<222> (121)
<223> n equals a,t,g, or c
<220>
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<222> (144)
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ccgcactttc cagcagggat cnngaaganc acccgagtcc caagaatggg gttttgcttt 60
ttaaaaaaga aaaaagaagg gtnattgcng ggattgaagt tcgcctggcn gtctatccgc 120
ncaaggatcc tctgtccttc atan
                                                                   144
<210> 3882
<211> 99
<212> DNA
<213> Homo sapiens
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<222> (12)
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<222> (52)
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<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (99)
<223> n equals a,t,g, or c
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atgccnaagt tnatactcta ttgagaaaag ctnggtacgg gttgcaggta cnagtccgta 60
attcccgggt cgacccacgc gtccgctccc gcngggccn
<210> 3883
<211> 99
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
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<222> (15)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
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<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<400> 3883
tttttttgga catnntcccc ccttttttt tttatcntna nccccccctt tttttttaa 60
                                                                   99
aaaaaaaag ggggggccc cccccctt tttnggggg
<210> 3884
<211> 99
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
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<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
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cnetttggae anntececce tttttttttg atetnnance eccentttt tttaaaaaaa 60
aaagggggg ccccccct tttttggggg gncccaaaa
                                                                   99
<210> 3885
<211> 104
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
<220>
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (104)
  <223> n equals a,t,g, or c
  <400> 3885
  gnnccccct tttttttaa aaaaaaaaa aanatttttt ttttnttttt tttttggggg 60
  gcccccccc cccttttt ntttaaaaaa aaaaaaaaa aann
                                                                     104
  <210> 3886
  <211> 188
  <212> DNA
  <213> Homo sapiens
  <220>
  <221> misc feature
  <222> (1)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (12)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (19)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (32)
  <223> n equals a,t,g, or c
  <220>
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  <222> (84)
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  <220>
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  <222> (115)
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  <220>
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. <222> (118)
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 <222> (154)
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<222> (172)
<223> n equals a,t,g, or c
<220>
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<222> (186)
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ncaaaggaaa gntggtacng cccaggtacc gntccggaat tcccgggtcg acccacgcgt 60
ccggcagggg cttggggcag cccnccctct cctccaccca gaccaagtgc ctganganct 120
gcctgccttc ttccatctga aaaagcaccc tccntccccc tttgacttgc angagccacc 180
aggganca
                                                                   188
<210> 3887
<211> 542
<212> DNA
<213> Homo sapiens
<400> 3887
ggcatcttct gaggtcaatt aaaaggagaa aaaatacaat ttctcacttt gcatttagtc 60
aaaagaaaaa atgctttata gcaaaatgaa agagaacatg aaatgcttct ttctcagttt 120
attggttgaa tgtgtatcta tttgagtctg gaaataactg atgtgtttga taattagttt 180
agtttgtggc ttcatggaaa ctccctgtaa actaaaagct tcagggttat gtctatgttc 240
attctataga agaaatgcaa actatcactg tattttaata tttgttattc tctcatgaat 300
agaaatttat gtagacgcaa acaaaatact tttacccact taaaaagaga atataacatt 360
ttatgtcact ataatctttt gttttttaag ttagtgtata ttttgttgtg attatctttt 420
tgtggtgtga ataaatcttt tatcttgaat gtaataagaa tttggtggtg tcaattgctt 480
atttgttttc ccacggttgt ccagcaatta ataaaacata acctttttta ctgcctaaaa 540
                                                                   542
<210> 3888
<211> 561
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (251)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (458)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (473)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (524)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (549)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (551)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (552)
<223> n equals a,t,g, or c
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gggtagatcc accettatge tteteagttt ageataacct ettatggatt tteatcaaat 60
tcagcgtgtt ggtcactgga aagagccttt tccttctcct tttcttactc tcccctcatg 120
gtgttcccct cttaaaggag aggagctttt aatttacact taccacctca tttgcttttc 180
tggaggccat gcaatatagg cgggactaca gagttaatct cctttttaca aatgaggcca 240
agagaagcct nattggttca cagtcatgca gctcatactg tccacccttg tattctcaga 300
tgcaggacaa ttgcatttta gttttatttt gtggaggtgc agaatattta ctctttctgt 360
ccaaccettg attetgeega ggaagacact gatggtttga tgagtgatte agetgttttg 420
gctaaggggc ttttggagct gatggcaggg gtttgatnaa ttcaaatgag ctntagacat 480
tatcacagac tgaatagatc tttaactggc tcctacatgt gtgntttcaa atgtgtatag 540
                                                                   561
aatgctatng nnattaaata a
<210> 3889
<211> 103
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
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3532

<221> misc feature

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<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n.equals a,t,g, or c
<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<400> 3889
naagtatggt acccctgcng gtaccggtcc gganttcccg ggtcgaccca cgcgtccggc 60
                                                                   103
cgnntaagag aagttgtaaa gtatgtatta ttcggccctg gnt
<210> 3890
<211> 73
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
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<222> (9)
<223> n equals a,t,g, or c
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<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
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<223> n equals a,t,g, or c
<400> 3890
ttacnaaana gaggatttac aaaaaccagc tagaggatat gatggaaaga agcaaatgaa 60
                                                                    73
annegggeag gen
<210> 3891
<211> 338
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (115)
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (158)
<223> n equals a,t,g, or c
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3534

<220>

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<221> misc feature
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<222> (277)
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<221> misc feature
<222> (327)
<223> n equals a,t,g, or c
<400> 3891
atgcacacaa tgccacgtgc ctngtgaaag catgaagcaa aagaaaggat gagatcaaag 60
cctgacccaa cttgacttnc tnctntagnt gagccaccgc accttgctgc ccctntcctc 120
cccttttgcc tctgtcaaat gacctactct gccctntntc ccagntgctg ctagacccag 180
agcacttgga gcaaccagct ggagggtttg gtaggetcac cettgttgtg etgatteet 240
ggctccacag ttctcaatgg nttgagccag ctcangntct ttctcacagg gaactggagc 300
aaaaatcctg tangagcaat tcttggngtt ggacaccc
                                                                   338
<210> 3892
<211> 70
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<400> 3892
gctgttttta aaaagtaaag ttcttagagg ataaaaacag ccacccaant ggngcntttt 60
naaggatcna
<210> 3893
<211> 132
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (95)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<400> 3893
gagegegttn gnagacaang atncaaagac aagaagaaaa taattetgeg caettaagca 60
ctggagagaa aggattagga tagaatggga gaccngcttt gcacaannat tccanggtat 120
                                                                   132
aggcgccaan gg
<210> 3894
<211> 310
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (76)
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<220>
<221> misc feature
<222> (192)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (198)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (260)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
<400> 3894
cttacgatan tnttgngcan gtacccctgc aggtaccggt ccggaattcc cgggtcgacc 60
cacgcgttcg tgtttnctgt agactgaact gctagaaaga tgagatgtta aaattcaata 120
taaacttgaa gaattttgta taattataat tatacaaaat ataggtaggg tgcacaatgt 180
tatcaaatgt tnatcagnat caaatgaaan cacctttgat aagctgcttt tgaaaatgct 240
gcctttttaa agaaatcgnn aattattgac atctgacagn actaacattg nggnagctgc 300
tctacagatg
```

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<210> 3895
<211> 349
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (177)
<223> n equals a,t,g, or c
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3539

<220>

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<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (315)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c
<400> 3895
tggaaanttc ttctatantn ttaggcangt acccctgcag gtacacggtc cggaattccc 60
gggtcgaccc acgcgtncgt gtggttccac ccaatatctc tcaggcatct acaaaggctc 120
tctcttcctc cgtcagagtc tggactgggt tcactggtcc ttgntnnatt gactgancan 180
atgtgattga caacagctgt gcctaggggt taacctagtg cccctgcta gatcaagtac 240
ctgactccca gcccagaatt gcccatctca gcaaaggagg gtggcattga gacttangtg 300
gatcataggc actnncatct tcatgagncc catcgcacat tanaataaa
<210> 3896
<211> 69
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
gccgggngat ccntgctgtg aggccaaggg cggcatgacc cgaggtggca agnagagcnc 60
                                                                    69
gagaacgac
<210> 3897
<211> 221
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (190)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (216)
<223> n equals a,t,g, or c
<400> 3897
ggtggatgcg gangcttggg tgcgttcaag aattcaaact ttnaacccgt aaacccaanc 60
ggccattggg cccnaaaggn aaagggcatt ttgncttggc tttgggaaag gtttgttaaa 120
aatggggaac ccggttttaa aattaaacct tgggnttttt ttaaacccaa aggaaaaang 180
                                                                   221
gggtttttcn ttttgaaaaa anaaaaactt ttgggncccc c
<210> 3898
<211> 237
<212> DNA
<213> Homo sapiens
<400> 3898
ggcctcctcc agcagagacc ctcggacccc tgcagggcct ggacttgggg tgaacagggc 60
ttcagtcagc gcaagtattc catttgcatt tggtaatttt tcatgccacc tatttatgaa 120
tatataaatc tttataccaa atctatttt taaaacatgg aaaagttgcc tttatggaaa 180
cttggcagag ccagagtgta cacattccta aaccattaaa cagatttcta taacaaa
<210> 3899
<211> 53
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<400> 3899
                                                                   53
ganacaattt ggcaccactt tgggggcttt tggaaaatcn tncccnagaa ngg
<210> 3900
<211> 479
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (290)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (371)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (443)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (453)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (454)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (456)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (471)
<223> n equals a,t,g, or c
<400> 3900
cctgcaggta ccggtccgga attcccgggt cgacccacgc gtccgctgag ttagaaaaat 60
catcttttcc aaacaccact gaaatcatgg actaggacaa ggttagccca tgagtgttta 120
gaccagtgag gtgagcagct gctggggaca ggacccttgt ctggtatcga tggcagggaa 180
ggctgtgagc ctccctcgt gtgggcatca gcctcagcct cccagtgggg gtcacccagg 240
gagcatatct cctggtgaga agtacaggag cttcacattc cctggatacn gtcccagccg 300
aaatgttcac cgtgaatccg gcaacctgtg gagctgattt ccatttctaa ggaacgaggg 360
gggatgggga ngaaccccc aggacagcac caacagtcct gcggggacct tttcccggac 420
acceggtett etteggtggt gangeatgtg genngnteee gaaaggeeee nggggggga 479
<210> 3901
<211> 421
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (197)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (260)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (286)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (418)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c
<400> 3901
ggcaggcacc tcaagaagat ggaccttgga ccaaggctgt aactccacct gtgaaagatg 60
ataatgaaga tgttttctct gccagaattc agaagatgct gggaagctgt gtatctcatg 120
caacttttga tgatgatctt cctggtgtan gcaatcttag tgaatttaaa aagcttcctg 180
agatgataag accacanagt gccatatcaa gctttanagt gagatcccct ggtcccnaac 240
cacaagggct actggcacan ttatgtaaaa ggcatactga ctcttntagc tctgatatgc 300
aagcctgttc tcaagacaaa gccaaaatat ntcttggttc cagcatagat tcagtcagtg 360
aaatggcctc ttcttagtga agggagtctc tctgaanaag agggataccc tngatggnca 420
                                                                   421
n
<210> 3902
<211> 421
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (410)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c
<400> 3902
gcaattctga ggtggtttat tgggagtcct tctacatttc tcttagataa ctctgcactc 60
tgggtggcta ttgtgtagcc ttactgcccc agagtgcctg ttagccaaat atttcccctc 120
tgataggaat attttctaag aatcagctga taacttgcgt gctggacctt gttatctgtg 180
cccctgggag acacacgttt tcttggtttt gaaaacctga aacacaggca actttacatt 240
ttggggaatt agctgatgcc tcctgaagcc tgaggaggtg gcggggaata tgagcggtgc 300
tgtctctctc aaaagtgccc tttagatgat tccccctcct agggctgcct gcaggggctg 360
tatgcttggg aaagattgtg tangtgacag tgaatcagaa tgaagtggtn agattttgtn 420
                                                                   421
<210> 3903
<211> 51
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
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<400> 3903
gagacttatt taattatgnn cnccatggaa atcactctcc ngttggncta t
                                                                   51
<210> 3904
<211> 139
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
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<223> n equals a,t,g, or c
<400> 3904
tggaantene tagetttgnt geneaagtgt atgeegtgga tggaetanat gagttaetet 60
tcctatggtg aatacgacgc atgggcgcat atataaagac tggggtggna tagatcccag 120
                                                                   139
aaanggtcnn tacgaggtt
<210> 3905
<211> 475
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (441)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (467)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (473)
<223> n equals a,t,g, or c
<400> 3905
ggctgacttg cttattgagg tcggcagctc ccgagaagca ggagaagcag agtttttgca 60
gacagaccca cgaagtcaag catgcggagt gcagccaagc cctggaaccc agccatcaga 120
gcagggggcc acggcccaga ccgggtgcgg cctctgcctg cagcctcttc cggcatgaag 180
agttctaagt cttcaacttc cttggctttt gagtcccgac tcagcaggct caagagggcc 240
agcagtgagg acacgetcaa caagecagga agtacegetg categggggt ggttegeetg 300
aagaagaccg ccactgccgg agccatctcg gagctcacgg agagccgcct gaggagcggc 360
acaggggcct ttacaacaac taancggaca ggcattccag ccccacggga attttcagta 420
actgctcaag anagaggtct ngtgccacgt ggtccctcca acctcangaa atnag
<210> 3906
<211> 69
<212> DNA
<213> Homo sapiens
```

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<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<400> 3906
gctcaaggtc tcctccttcc ctccccccc cccccgtca cttggntnat caaccttnnn 60
ggcatttgc
                                                                    69
<210> 3907
<211> 77
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<400> 3907
nttgttactc tggttactgg ggncgtgccn cgctggcana gagccgccgc cgcgagggat 60
                                                                   77
gctgntgagg aagccgt
<210> 3908
<211> 436
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (408)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (417)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (420)
<223> n equals a,t,g, or c
<400> 3908
naaactgtcc tatcttgttc tgtaaaatat tagaacgctt tgttttacaa aaaatgatga 60
gagaattett ecacatgtae ttetgtgett agaacatttt taeggaeeta agegetggag 120
```

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acgttgctgc atgtcggctg ggtttttttt ttcatacacc cgagcacgga aaaactaacg 180
caaaattgta ttttcttacc tagtggaaat ctgaaatgac tgcaaattcc tagtgaatgt 240
acaggtttgc tttcgtgtcc ctctttggtt gctttaaaaa gtgacgtgta atttctgacc 300
catgtttaat ctgtataaaa aaacttctgc cccagttttc tctgncccct ataagagcca 360
acttgagttt atgccggttg ncattataat tcaataatct tttttcantt aaaaaanaan 420
                                                                   436
attaaaaag ggcggc
<210> 3909
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (99)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<400> 3909
tnaataccct tggactatcc gactacttag ggaaagctgg tacgcctgca ggtaccggtc 60
                                                                   104
cggaattccc gggtcgntcc acgcgttnng ttatatatnc anac
<210> 3910
<211> 87
<212> DNA
<213> Homo sapiens
```

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<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
<400> 3910
aattcccacn gactattcgg aaagctgccc gcctgcaggn accggnccgg aattcccggg 60
tcgtnccacg cgtttttnac agacgct
<210> 3911
<211> 423
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (385)
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<220>
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<222> (412)
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<400> 3911
gtttcttnta gttcaataga tgtgcatang gtagctttag caattaaatt ctnnngaagt 60
tgatatagtc tcatttttaa ttgtcctgta atggaacagt agnaaattca ctaaactttt 120
```

```
gtgttcagag ttaaattgnt ctcagtactt tcaatgtagg ggaatgtaat aaacatagng 180
tgtatgtttg ggttttaatt acacatttta tatatgagcc atttagatat gcagtgttaa 240
ttctatactg catttgaagt gtatgtaact tagcttatgt taatgcagtc atgaagttgg 300
tttgctccag catcacggta gtctttaaac attcttttag tgaaattgtc attgntntat 360
cagtgctaat gtgtgcaagc agngntttta cctgcttttc tcctggcatc anaaagtggc 420
                                                                   423
ggc
<210> 3912
<211> 72
<212> DNA
<213> Homo sapiens
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<400> 3912
nttaataagc tagaantatt acaacccctg tgtntntggt ncttatcaaa tacttagtat 60
                                                                   72
catgggggtt gg
<210> 3913
<211> 106
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (104)
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<400> 3913
nccaggatta aaagccatga gtttcttgtc aaaaattttg ctgctctcct gctggggggg 60
ggggggggc agtataccac ngaaatganc tatancaaag nctnta
                                                                   106
<210> 3914
<211> 701
<212> DNA
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<223> n equals a,t,g, or c
<220>
<221> misc feature
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<223> n equals a,t,g, or c
<220>
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<222> (686)
<223> n equals a,t,g, or c
<400> 3914
gcgtgcaacg tggctccgtg cgctgctcct gtggcggcct ggcctctccg tgcccctcct 60
ggcccttggg ctccttgccc tcagaagagg ggccccgtca ccctcagaag aggggccccg 120
tcaccctcag gtctgggcta gcccggacta gggaggtttc ccctcccttc tagacacttc 180
catggcccca gctgtcctga gacgcggctc cagaatccaa ccaggcctga atggcacctg 240
cceteteage gtggagegtt tgccaagage acgccgactg cagggegeca ggctagagec 300
tggaaatcta agcggggccc ggcctgccca gctccatgga gtctagggtt cacaacgagg 360
tgctgtgtgc acceaettgc actggcetgg cettggetee etgecagece cetggcaggt 480
gacactgtgt gtaggcagag cccgagcctg ggctgcaagg cattccacac acgcagnatn 540
canagagagg atccaggtca nggcccggga aagccttgca tgcttgggac acaagtcgtt 600
cttggaaaag gacaagcttg gaagggggga caagtnccca aaancaacgt taccggcttg 660
                                                               701
ggaattttcc tttnggccct tgancnaaaa agccttaaaa a
<210> 3915
<211> 70
<212> DNA
<213> Homo sapiens
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<222> (58)
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<400> 3915
gagccccgnt tatggaagat gaanaggagg atatgggggt ggaatgacct aatggagnaa 60
                                                                    70
aacacattnt
<210> 3916
<211> 88
<212> DNA
<213> Homo sapiens
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<222> (29)
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<222> (40)
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<222> (72)
<223> n equals a,t,g, or c
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<222> (76)
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<400> 3916
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3557

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gctcaaggtc tcctccttcc ctcccccnc ccacctagan tgggcctcat tgggcagaag 60
ttgcagnctt tnttanattg cctgcaaa
<210> 3917
<211> 394
<212> DNA
<213> Homo sapiens
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<222> (11)
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<222> (231)
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<222> (246)
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<220>
<221> misc feature
<222> (346)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c
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<221> misc feature
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<222> (393)

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gattaaggga nngtcgttct cagtgaaaat ccaaaaacca gaaaaaaatg tttatacaac 60
cctaagtcaa taacctgacc ttagaaaatt gtgagagcca agttgacttc aggaactgaa 120
acatcagcac aaagaagcaa tcatcaaata attctgaaca caaatttaat atttttttt 180
ctgaatgaga aacatgaggg aaattgtgga gttagcctcc tgtggagtta ncctcctgtg 240
gtaaanggaa ttgaagaaaa tataaacacc cttacaccct tttttaatct ttgccattta 300
aaagttctgg cttaactttn gaattccatt tagagaaaaa aattcnttgg tacccaggaa 360
ttcatttcaa tttcnaattt gaaataggtt gnng
                                                                   394
<210> 3918
<211> 382
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (320)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (335)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (367)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (379)
<223> n equals a,t,g, or c
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gtccatattt ctctgcatct tctcttggag tgagggaggc tacctggagg ggatcagccc 60
actgacagac cttaatctta attactgctg tggctagaga gtttgaggat tgctttttaa 120
aaaagacagc aaactttttt ttttatttaa aaaaagatat attaacagtt ttagaagtca 180
gtagaataaa atcttaaagc actcataata tggcatcctt caatttctgt ataaaagcag 240
atctttttaa aaagatactt ctgtaactta ngaaacctgn catttaaatc atattttgct 300
ttagggaaaa gctttggttn gtgttcgtgt tttgnttggt tcacttgttt nccttccagc 360
                                                                   382
cccaaanctt ttggtcttnt cc
<210> 3919
<211> 382
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (353)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (382)
<223> n equals a,t,g, or c
<400> 3919
atgeeteatt tgatgneect ggteegettg eaggteegge eggaatteee gggtegeeea 60
cgcgtccgta atgatctgca tcagttgtaa aggggaattg gtatattcac agactgtaga 120
ctttcagcag caatctcaga agcttacaaa tagatttcca tgaagatatt tgtcttcaga 180
attaaaactg cccttaattt taatatacct ttcaatcggc cactggccat ttttttctaa 240
gtattcaatt aagtgggaat tttctggaag atgggtcagc tatgaagtaa taggagtttg 300
cttaatcatt tgtaattcaa acatgctata ttttttaaaa tcaatgggga aancttagac 360
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382
taattttaaa atngtnccat nn
<210> 3920
<211> 241
<212> DNA
<213> Homo sapiens
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<222> (17)
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<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
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<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (144)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (175)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (216)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (233)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
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cattcgactt antcttgact tctgtgtcat tctttaaacc ttttatggct agagtttcca 120
ctatcccaat caaaqaattc agtncacatc ccagaatcca taaatgtgtt ctggnccact 180
ctgtaataag gcaccaagaa ttaccactaa ttcatncaga ttttacctat canaatanca 240
                                                                   241
<210> 3921
<211> 110
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
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<222> (61)
<223> n equals a,t,g, or c
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<222> (71)
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<222> (94)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (104)
<223> n equals a,t,g, or c
<400> 3921
gcggaanatg gcccgcctgc aggtaccggt ccggaatttc cgggtcgatn tacgcgaccg 60
                                                                   110
ntttaagacc nggtgataac tgagcctcaa tggngcagaa actnggggct
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<211> 138
<212> DNA
<213> Homo sapiens
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<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
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<222> (122)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (133)
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3563

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gaagaacgng aanganggag accgcnggga gcagagcaaa accagggaac ccaacaaaca 60
aaagaacggn gccgaagaac gggaccgaac cccacccgaa gngccaagaa acccgaggan 120
anceggacce genacgee
<210> 3923
<211> 263
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (84)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (110)
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<220>
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<222> (129)
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<220>

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<222> (180)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
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<221> misc feature
<222> (192)
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<220>
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<222> (221)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (263)
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gggntttaaa agccaggcct gccaggaccn ccaggcggna caggtgcnaa aggcctccga 60
ggaatcccag gcaacgcagg agcngatgga ggaccagggc ccaggggctn gccaggagac 120
gcaggncgng aagggnaccc aggaccccca gggnacatag gaccccgagg atccaaaggn 180
gcagngggcc ancetggccc agatggatec ccaggaccca neggeetgec agggecagat 240
                                                                   263
gggcccctg gggaaagggg ccn
<210> 3924
<211> 296
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
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<222> (106)
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<222> (115)
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<222> (132)
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<222> (165)
<223> n equals a,t,g, or c
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<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
<220>
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<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (273)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (279)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (284)
<223> n equals a,t,g, or c
<400> 3924
aattgggcca ccngggttaa cccccggggg gttncccccg ggggtaaaaa atnttccccc 60
cgggggggg ttnccgggaa acntctccaa accgggcccg ggtttnaaac cgggnttttt 120
tttgggaaag anaaattggt aaaattgggg gggcaattaa aaggnccctt ttttttaaac 180
caaaggggcc naaccnaaat gggggcccaa atggggtttt taaagggggg cccaaaaagg 240
gttaaatttc caaaaaaggg ntnttaaaaa ttntttttnc cccnccttgg ggtgtt
<210> 3925
<211> 152
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (100)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<400> 3925
gacctctgct accgnggtag ctgacaacat atagnatgag gtttggatct aagtctgntt 60
cctctcacat gattacttga cagctaagca tctgattggn ttactgctgt accactgagc 120
                                                                    152
tgaaatgccg tgtgnnccat tnatgtaaaa tc
<210> 3926
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<400> 3926
ggtcccgaat tccngggtcg acctacgcgc ccgggatttc agancnattt ggccttaata 60
catttccagn gtgaccngca gcaggctttt ttcccccaag aaga
<210> 3927
<211> 99
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (97)
<223> n equals a,t,g, or c
<400> 3927
aacgangaac ccttagcang aactcccggg aaatccnngc aaacttttcc ggaaanctgc 60
                                                                   99
cccgcntgca ggtaccggnc cgntaattcc cgggttnac
<210> 3928
<211> 99
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
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<222> (41)
<223> n equals a,t,g, or c
<220>
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<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
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<222> (87)
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<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (97)
<223> n equals a,t,g, or c
<400> 3928
gttggngaac ccttaagann gactcccggg gaatccccgc naanttttcc ggaaaacagc 60
                                                                   99
cccgccggca ggnacacggt ccggaanncc cgggttnac
<210> 3929
<211> 314
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<400> 3929
gcacacaaat aatttattta gcatattgtt ttctccaaat gttgttgatt tatattttgg 60
aatactgtag tgctaagccc aaaacattta agtcggatga tcgaggataa tcctttagaa 120
ttatggaaac ttggaattgg aacacagttt tagtagcctt tagaacaatc agcacacgtc 180
aacaggacac tcccaccaga gcagtctgtt tgaggcattt cttgaagcct aaatccaaca 240
agaaggccca gctcaaaaat atggcagcct cactcacgtt tccccattat gttgccttcg 300
                                                                   314
aattcctgaa ctcn
<210> 3930
<211> 298
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
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<220>
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<222> (296)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c
<400> 3930
tangggcage etcegteate catgeeetee caggaeeete caeteaetge tgtgagtgeg 60
cctcaccaga accagttaag agacaactat caattcttga gacccaaatt ataagggccc 120
tgccctgtac tgaagaaaag gggagcacaa ggccttaatg gacattgact tgtgaaaacg 180
caaacatgaa tatggttgga gagccctgga ttaggagggt gacatgggga aggcagaggc 240
tggcaccatg gtgactgcca cataataaag tggtgatttg gaaaaaaaaa aanngnnn
<210> 3931
<211> 114
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<400> 3931
tntaacattg ggactttnca agactntata gctatatagt gcctattata ctgcangtac 60
ttacaaactc atttataant atacgtacaa aatggaaaaa tagaaaagta ggng
<210> 3932
<211> 99
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (85)
<223> n equals a,t,g, or c
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<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (96)
<223> n equals a,t,g, or c
<400> 3932
ancegeagge acetteteae teteaaggaa ggnacnetee eeetgeaggt aceggteegg 60
                                                                    99
aattcccggn tcgncccacg cntcntnaaa aacaanaaa
<210> 3933
<211> 99
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (28)
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<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<400> 3933
ctgcagcacg ctcgtcatat agtggaanga cncacccct gcacgtaccg gtccggaatn 60
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cccggttcga cccacgcttt cntgacnatg ngtgaagga
<210> 3934
<211> 99
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
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<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
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<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<400> 3934
cgcttcnata ctttanngtc aggtacncct ccaggtaccg gtccggaatt cccgggtcga 60
cccacgngtc cganttnant ttcaaaccaa aaaaaaaaa
                                                                    99
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<210> 3935
<211> 52
<212> DNA
<213> Homo sapiens
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<221> misc feature
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<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<400> 3935
                                                                  52
tctgagantg ccgggccnct cagggcnggg ggagaagntg aaagtctaac ac
<210> 3936
<211> 88
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<400> 3936
gctttcttat tagaaatatg atacgaatgt gtnagcanac gacangtgcc tttanaatta 60
                                                                    88
canttctaac ttacatattt tttgaaag
<210> 3937
<211> 80
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<400> 3937
ggatantaga tgattggtta aaccccctaa tcagatagta gatgattggt tttnaatagg 60
ttnanccnat gatctactat
                                                                    80
<210> 3938
<211> 66
<212> DNA
<213> Homo sapiens
<220>
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<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<400> 3938
ctgatcaaga atttggngtg gacgtaggcc ctgntgagct ttttataaac caaactctat 60
atgaaa
<210> 3939
<211> 117
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<400> 3939
aaaatgaaac atattatgag aggatataan gaataaattt cnaatactca tggncttact 60
gtattcatga atcacatagt tncaacgacn tcacacctgg gaaagggaat attgcta
<210> 3940
<211> 189
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (177)
<223> n equals a,t,g, or c
<400> 3940
gaaaaaatac aaaattaaaa cctgtatcat gacaacagta atgtcttccc ccaccagaca 60
cagtaagaag aaggaaaaaa gcaaatgagc aaacagtact atcataagcc nagaaaaaaa 120
ctgcactgga aagaaatata ccaaactgtn ttntaaaaaa aaaaagnggc taggttnggg 180
                                                                    189
tactagaat
<210> 3941
<211> 399
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (268)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c
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<222> (345)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (390)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (393)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (396)
<223> n equals a,t,g, or c
<400> 3941
gcaaaggagg acctggacaa atgtgcccac acatcctctc aggcgaggag aatggacagg 60
agagagaggc cgatccgtgt tccccgtgtt gctatgtaag gaggtgcggg accgaggaac 120
ctaggtgtgg acagggacag gcaaggcggg ggacgaagag aaatgaaagc cacatcggtg 180
geggatgtte tgaacacaac tegetegeta eegcacgtte eeegcteege acteanegga 240
tecegggaeg geageaggtg geteetgnae gtgegeegge teetgeaang tgeaaagagt 300
gcaaatgcac cttctgcaag aagagetgct gttcctgctg ccccntgggc tgtccaagtg 360
tgcccatgct gcgtctgnca aggggcatcn ganaantgc
                                                                   399
<210> 3942
<211> 146
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (112)
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<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<400> 3942
gaaaacatac nggagtctgt ctctgctatg gaatgcccca tggggcatct cttgtgtact 60
tattgtttaa ngtttcctca aactgtgatt tttctgaaca caataaacta tnttgatgaa 120
aaaaaaaatt aantaanaan taaaaa
                                                                    146
<210> 3943
<211> 353
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
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<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (22)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (31)
 <223> n equals a,t,g, or c
 <220>
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 <222> (53)
 <223> n equals a,t,g, or c
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 <222> (55)
 <223> n equals a,t,g, or c
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 <222> (75)
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 <220>
 <221> misc feature
 <222> (86)
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 <220>
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< <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (118)
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 <221> misc feature
 <222> (145)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (185)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (196)
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<220>
<221> misc feature
<222> (205)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (217)
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<220>
<221> misc feature
<222> (234)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (273)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (341)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (353)
<223> n equals a,t,g, or c
<400> 3943
gaanntgaaa nctntctgac angaaatagt nctggatggt ttgaagatct gcngngaaaa 60
ataagtgtgc acctnagacc ttcagntagn cttttattta tttagaataa aaaatagntt 120
gataacctac cagagttagt gcttntttaa aaacactcct tggaaagatg gggactgtcc 180
cttangaaag ccatanaagt gattnccaat actttgnaat tgcttttgat tttnaggtcc 240
tttggaacaa atgtgtgatg ttatgtctga tgntgtgttc ttagagctgt gaanagtttg 300
aaaaatntca aggggtttat ttaaatgatg aattatctgg ntgaaattat ggn
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<210> 3944

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<211> 52
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<400> 3944
ggacatacac ngccnacagn ctgcgggcgn tganacctat actgaccctg tg
                                                                    52
<210> 3945
<211> 456
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
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<220>
 <221> misc feature
 <222> (25)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (80)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (214)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (438)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (450)
<223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (452)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (454)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (455)
 <223> n equals a,t,g, or c
 <400> 3945
 agntgttacg cccgcaggnn ccggnccgga attcccgggt cgacccacgc gtccgagcta 60
 ttacactagc cttttagatn tactgtagac atctgtgaaa aattatgaat tggcctttat 120
 tacaagactt tgttttcaaa cctttatttc tgttccaatg taaatgataa tcgaacttta 180
 ctggagaaaa gacccatgat tttaaatata gttntatgtc agcttatagt tttacatcag 240
 agtccatata gctgttagaa agttatgtgc tactgacaaa ataacagttg gcaaaacata 300
 agacaaaatc tacaatttta ttcacaggat ctaactaatg taccattatt attaccaatt 360
 gatctcagtg tgctataatt ttggtaacaa tttctttgat atgcttttaa aaatatatat 420
 atatttacaa ataaaggnat aatttttaan ananna
                                                                    456
```

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<210> 3946
<211> 146
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (141)
<223> n equals a,t,g, or c
<400> 3946
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cnnctnatgg aatctcnact ataggttaag ctggtacgcc tgcaggtacc ggtccggaat 60
tcccgggtcg acccacgcgt ccgtgaaatt nagttatagt ttaatctttg taatctcact 120
                                                                   146
aatgggtttn atanatgaan ncggaa
<210> 3947
<211> 68
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<400> 3947
gcaaagaggg cttcnaaaac tacngancng taagggcggg actcaccata gaatgcaatg 60
antatgtg
<210> 3948
<211> 335
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (276)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
<400> 3948
gctgcctcca tatcgtgagt tgctagttgg ccaccttgat ttgctgccct tcctggagca 60
gctgtactgc tgggcaccct gggtccaaac ccacctccat ctggacctgc taggtgccat 120
tgtccaggcc tttcctccag acagctcttt gttagacagt gcttcccatg ctgactgctg 180
tccccagaag cggaggctcc atcacaggcc cccatgccca gcttgccctt ttgtgcaggc 240
ccagtggagc aggcagcaag taaaggagga nctggncacc tggctgggac cattgacact 300
                                                                   335
ggctgagcta cagngctggc tgggcattgn tggng
<210> 3949
<211> 179
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c
<400> 3949
cnttcnttgg gcctttaatc tgccnatcca ttcatgatca ttggaaggcc taatatatgc 60
caagtctnac atggtatgca ttgagacata cganagactg ctatacctca ataagtattg 120
aaaatccatt attacccata agggncatct taattcattt tanggaatna nattcatgg 179
<210> 3950
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (76)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (104)
<223> n equals a,t,g, or c
<400> 3950
ntaggcctac tactaaaggt ggaagtntta gaggttaaaa tggtgttcnt aaattagctg 60
tatacacaat cattgncatt tactttatga aanggtagga gatn
                                                                   104
<210> 3951
<211> 314
<212> DNA
<213> Homo sapiens
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<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (312)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<400> 3951
gccccantgg accacctccc tttccctgag gcagggagcc cagagctggg tctgctggtg 60
cctggcctgc ggcagctgct tacacaacag tgcatcagca ggtgctccca gggcttctgg 120
gctcctgtga ccgctgcctc cccagtgctg catcgcccgt gggcacccag gggatggctg 180
tctggaatag aggcagcagg gtcctgcacg ctgttcatgt actatccgtc cgtggggcgt 240
gcagaacgtg ctgccggctc ttcctggctg cagccttctc cgacccagtc ctccagtgga 300
gggggggatc cntn
<210> 3952
<211> 157
<212> DNA
<213> Homo sapiens
<220>
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<222> (147)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c
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<222> (154)
<223> n equals a,t,g, or c
<400> 3952
ggataattat ggataatctt tgatcctaca ccagaactct gcaaattgtt tttttaaagg 60
ttaattacaa tgtggaattt gaaactatat caatgaactt gtactcttac attaaaagtc 120
attgctttac cttcaaaaaa aaaaaannan atnnaaa
<210> 3953
<211> 130
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (61)
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<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
<400> 3953
caanaacctc anactttagg taaaatcggt catcaagcat aatcccactg tgatnattca 60
nggtccaatt aaaaatttga cgnatgattc caaatgtgac gngaatgaga tcataaaggt 120
ctantatctc
                                                                    130
<210> 3954
<211> 392
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (194)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (386)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c
<400> 3954
gccagcctct ctgtggtaca tcgtgtattg cacggagtcc cttttcttcc agagatcttc 60
cttgggagcc ttttcctccc gcgcgtcccg tctcggtgcc gccttttgct cccgcgcgtc 120
ccgtctctcc acgccgactt ttcctcccgc gcgtcccgtc tctccacgcc gccttttcct 180
congagegte cognetecce geogeetttt geteegege gteeegtete egegeegaet 240
tttcctcccg cgcgtcccgt gtccatgtct cctccttgta acatctggag agatttcctt 300
cactttgtgc ctttttctcc atcgattgat ttctttgttt tacgtttaac aattaaagnc 360
                                                                   392
ttaatttcta agaanaaaaa aantancana aa
<210> 3955
<211> 138
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<400> 3955
gggtncaata tttngttcat aagactgaac tcctgatggt gacttctaca acttgnatat 60
tcagacncga agangaccaa atattcatga aatactggct ntgtgctnat atctcctata 120
agtccgaata tgctgtga
<210> 3956
<211> 221
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (174)
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<220>
<221> misc feature
<222> (182)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (192)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (193)
<223> n equals a,t,g, or c
<400> 3956
natagttgat acaagaattg tgaactcgtn tcatagatat acatacgaca tattggtcga 60
gatgctctaa ctgngcnata nggttgcact attgcagtga tcttgactag agtttanggg 120
gaagtaattg agatttcatc ggaatgcacg tanctatatt gttacatgga gaantctagt 180
                                                                   221
gntccttgaa cnnttgtatc gccccatta aaaaaaggaa t
<210> 3957
<211> 116
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<400> 3957
ttacncaagt ggggggagaa taaatgttgt caggtcctgn gtctntcggc cattatgaac 60
atgtcatngc gtgcctcatg taccangagt ggaaacacaa tcacctgcct anttca
<210> 3958
<211> 126
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (105)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (116)
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<223> n equals a,t,g, or c
<400> 3958
ngaaagctaa aaatgctant gagcggcatg atacgtgtga canttaacat gaagggttcc 60
acctgncaaa ctgtcatgna attcccgagt ggaccctttg ccatntttgt tgggcncaac 120
                                                                   126
ttgact
<210> 3959
<211> 250
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (250)
<223> n equals a,t,g, or c
<400> 3959
gcaaaaccat atttaatttc caggttatct tgaacaaggg aaggaaagat gttaaagctt 60
tgttttcatg gcctgtgtga agctgttaca ggatgtttgt tgccagaaaa ggctggatgg 120
ttttaagaag atgggtcttt ctcttccctc ttatgcttca attntatttt gtaccccaca 180
gettetettg aacageetet tetgatgttn etaggtagna ggaacettae aaatacattn 240
                                                                   250
atatatatgn
<210> 3960
<211> 134
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
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<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<400> 3960
gaantntgct caatgatggg cctgtctaag attaccatag accatgcccg catctatggt 60
ggacccangn ttacacagga ggacccgtaa ttnaattgtc atataaggac tttaatggct 120
taaaaaaatt tngn
<210> 3961
<211> 56
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<400> 3961
gataaaatgt acacccctna aaaaanaaaa taaaaanaaa aangtattaa tnaaaa 56
<210> 3962
<211> 150
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (149)
<223> n equals a,t,g, or c
<400> 3962
gcgccgcccn cactcgccgc aggaccggcc cgcccggctc ccggggtgcg ccctcctcgg 60
tecegegeee teegggeteg eagggaegte tecteetee eggetegegg teeegeegg 120
neeggaenee gneeagagne eeagegegne
                                                                   150
<210> 3963
<211> 216
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
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<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (193)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (212)
<223> n equals a,t,g, or c
<400> 3963
gtgcgacaat tgcaagttaa ttanncncgg gggaaaagga taggacanat ccctggaccg 60
gtagagacta ggccacncca ttgcatagtc ttgtatgaag ctcgcaanac ttcgttcgct 120
aggcgagaac aagtggacgc ctcgttacac atgtacagca aaatgactgc tggtcaagng 180
atgaataagt gtntgagtaa cgcttgctgn nnacga
<210> 3964
<211> 149
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (144)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c
<400> 3964
ntacaaaang ggatatatat tatgaaatgg tcatttttnt gaananaata ttttgcttga 60
aatgcatagg actgaaagag atttgtatgt tgttgattaa tgtaacttca tactgnaact 120
tttaaaaana tttnatctgt aaanccntg
                                                                    149
<210> 3965
<211> 139
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
<400> 3965
tnaatgttta aatanttgag ggatgtgcct ttcnncttat gtcttgctgt atgtagtagt 60
atgtagtagt agcatgatta tatgaagntt caatatgcat taactaangg gatactcaaa 120
                                                                    139
ngtaatatng aagaaanac
<210> 3966
<211> 117
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<400> 3966
ngggtgactc tttgnccatg tgaggtggta tattcncagg atnctgctgg caagagatgn 60
tattcctgcc cagtctatca aatgatctct gattctttac gtaatggggg ctnattn
<210> 3967
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (85)
<223> n equals a,t,g, or c
<400> 3967
gacttgatga atgagagaca agaaagatag ttgcagantc atgtgctcat gaatgcatan 60
                                                                   104
aacacntatc anaagcaaaa atggnttgaa gactttgaaa tact
<210> 3968
<211> 378
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (368)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (372)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (374)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
<400> 3968
gattttaagc tatttgagat tgcttttggg aagatcacta gatttatgga ggaattagtc 60
acaaatgact tgtagaaaat actgtcatat agttcatttc atcattttct gttgcaggaa 120
gccactccac cacagaatgc taatatgcca gtggtaccca gtacctcttg tatataggtt 180
attgcaaata ttgttctgaa atgcttaact tcagaattac attttttaaa gtaaataatt 240
gttttaaatc tattttgtaa agatataaag tacaatagaa tttctggagt acagattaaa 300
ctatttgcac taacacacgt gacgtgcatg atttaataaa ataactttac tctccctaaa 360
                                                                   378
aaaaaaanaa anannnaa
```

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<210> 3969
<211> 55
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<400> 3969
                                                                   55
ggtttaaaaa catttattgg ctgggtgtgg tatatnagat ttatnnaant ngatg
<210> 3970
<211> 84
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<400> 3970
gaaacaatac ataanttnat tgaatctata actngnttta agttgatata atgcattgta 60
ttatatnttg aaacagaata aaag
<210> 3971
<211> 92
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<400> 3971
gatttncttg agtcttgtac atagaaaggn agctgtcaat tnnaaatcag ttnttcagat 60
tttactgtgg aagcatattt aatgcacaca tt
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<210> 3972
<211> 238
<212> DNA
<213> Homo sapiens
<400> 3972
ggcttttcaa tctatttaaa gtacagctct ttttccctta tttctgattg tttactctgc 60
cattttcctt taattgtctt ctatatttgt tgaatgctta gcttactaat tttcacttta 120
aaaagaaagc atataaggtt acttatatga tttttcctct gagaagtgct ttaatatcat 180
<210> 3973
<211> 152
<212> DNA
<213> Homo sapiens
<220>
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<223> n equals a,t,g, or c
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<222> (24)
<223> n equals a,t,g, or c
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<222> (25)
<223> n equals a,t,g, or c
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<222> (30)
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<222> (41)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (120)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
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<222> (142)
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<222> (143)
<223> n equals a,t,g, or c
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<222> (148)
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gnaaacccca atgggaaata ccannagatn atacgcaaag ntggaccggt ccggaattcc 60
cgggtcgacc cacgcgtccg ggggcggggg tctatacttc atacccgccc taggccttgn 120
tgatgaaagt tncacacaga annagcanct ac
<210> 3974
<211> 155
<212> DNA
<213> Homo sapiens
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<222> (23)
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<222> (52)
<223> n equals a,t,g, or c
<220>
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<222> (129)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
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<222> (150)
<223> n equals a,t,g, or c
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cacacatgcc actatgagct ttnnnacncc agctgtgaag agactctgtg angcttgcgt 60
actgtttgca gacctctctc tgacatggcc ttggcaggct gttggaaggc atctagtgga 120
ngccgatnnc tncgaccact cataccttcn catgc
<210> 3975
<211> 100
<212> DNA
<213> Homo sapiens
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<222> (10)
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<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
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<222> (43)
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<220>
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ctggaactgn gctatcccct atgagggctc aatggaactn gangtctagg atgcagcctg 60
                                                                    100
tncacttgcg accntgttta gagggggtgt acttgaattt
<210> 3976
<211> 67
<212> DNA
<213> Homo sapiens
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<222> (48)
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<222> (49)
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<222> (55)
<223> n equals a,t,g, or c
<400> 3976
gaacganggg acgtaacgga agcangttgg aacccgttgc cgtcgccnng aaccngggga 60
                                                                    67
accagcg
<210> 3977
<211> 386
<212> DNA
<213> Homo sapiens
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gcggangcgt gggcggacgc gtgggcggac gcgtgggcgg acgcgtggga aagagtttaa 60
gtgtctaaca aacttaaagc tactgtagta cctaaaaagt cagtgttgta catagcataa 120
aaactctgca gagaagtatt cccaataagg aaatagcatt gaaatgttaa atacaatttc 180
tgaaagttat gtttttttc tatcatctgg tataccattg ctttattttt ataaattatt 240
ttctcattgc cattggaata gatatctcag attgtgtaga tatgctattt aaataattta 300
tcaggaaata ctgcctgtag aagttagtat ttctattttt atataatgtt tgnacactga 360
atttaanaat tgntggtttt ntcntt
<210> 3978
<211> 273
<212> DNA
<213> Homo sapiens
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<222> (254)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<220>
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<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (273)
<223> n equals a,t,g, or c
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ggctgcctgt acacctgctg cctacatctt cttggcaaca aagttacctg ccacaggctc 60
tgctgagcct agttcctggt cagtaataac tgaacagtgc attttggctt tggatgtgtc 120
tgtggacaag cttgctgagt ttctctacca tattctgagc acacggtctc ttttgttcta 180
acttcagctt cactgacact gggttgagca ctactgtatg tggagggttt ggtgattggg 240
                                                                   273
aatggatggg gganagngan gaggacacac nan
<210> 3979
<211> 156
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (156)
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gtctgaaagg aggaattttc attttccttt aaagtgaaaa ggtaaaaact gcatttacta 60
aaccaggccg gtgggggctc tgtgagcccc tntgcacagg aagcctnaga gactctgcat 120
ggtgttcccg gngcatcctg gccaangtgg gagaan
                                                                   156
<210> 3980
<211> 59
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<400> 3980
getcaaggte teeteettee eteeceece eeeeegtnt atettteant gtgnntnta 59
<210> 3981
<211> 82
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
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<222> (64)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<400> 3981
ggcagggggg ncgctgcagg ccttagggga agaaccacgg gacanggtag aagacaaacg 60
                                                                    82
ttgnattggg gcttcccttn na
<210> 3982
<211> 296
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
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gcagatactt agatgtttat tgatatgaga ctatgtggtt aaaaaaaccca agtatgtcca 60
tgtgtttctt ataaggtaca cttgaaacta gtgagtgttt gtcacatttc actttcatgg 120
tatataaaat gcagtttgca tatataactt gaatatctgg tactagtttt ttcacgcctg 180
caatcttgga gtctaggttg ccttgctctc ctatttttaa ataagtgaaa tttgggagat 240
tgtaaaatct gtaaagtttg ttttgtgaaa ataaaatgtt cacagtagaa aaaaan
<210> 3983
<211> 133
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
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<222> (77)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (105)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<400> 3983
tctngaaaag ccntgcngga cttccccagg tacccctccg gaattcccgg gtcgacccac 60
gcgtccgccg cctcttnggg gctttaggcn ggcttgcccg cgctngggnt tcccncgtga 120
                                                                   133
cagtggtgtg tgg
<210> 3984
<211> 452
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
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<222> (8)
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<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
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<222> (27)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (100)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (295)
<223> n equals a,t,g, or c
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<222> (302)
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<221> misc feature
<222> (326)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (337)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (369)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (406)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (422)
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<221> misc feature
<222> (429)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (442)
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<400> 3984
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ggtccggaat tcccgggtcg acccacgcgt ccgggtggan ggataggaga aggtcctgag 120
tcagtgctgg gtggagggat aggagaaggt cctgagtgtg gactgggtgg agggatagga 180
gaaggtcctg agtgaggact gcatggaggg ataggagaag gtcctgagtg agtgcttggt 240
ggagggatag gagaaggtcc tgagtcagtg ctgggtggag ggataggaga aagtnctgag 300
tnaagtgctg ggtggaggga tagganaagg tcctgantgt ggactgggtg aaagggatag 360
gagaaggtnc tgagtgagga ctggggtgga gggataggag aaagtnctga gtgaggactt 420
gngtggagng ataggaaaag gntcttgaat ga
                                                                   452
<210> 3985
<211> 316
<212> DNA
<213> Homo sapiens
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<222> (1)
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<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (80)
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<222> (107)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
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<222> (120)
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<221> misc feature
<222> (156)
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<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (165)
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<220>
<221> misc feature
<222> (176)
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<222> (181)
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<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (203)
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<223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (212)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (252)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (278)
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<221> misc feature
 <222> (307)
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 <220>
 <221> misc feature
 <222> (308)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (312)
 <223> n equals a,t,g, or c
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 acactgattt ttangctgnn ccctcttggg cttcatgcaa agacaantnt gtgtaaatgn 120
 acagaagact ctgatttgga aatatgaaaa tcagtncatn cttgntataa aaaatntttt 180
 nacaatngta attatattga agntcatatt gngtaaaata actcatttaa taaaatagaa 240
 ctttgattca cngacaaaaa aaaaaaaaa gggctggnca gctctaaagg atccaagctt 300
                                                                    316
 acgtacnngt gnatgc
 <210> 3986
 <211> 57
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc feature
 <222> (4)
 <223> n equals a,t,g, or c
 <220>
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<221> misc feature
<222> (12)
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<221> misc feature
<222> (40)
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<220>
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<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<400> 3986
gctnaaggtc tnctccttcc ctccccccc cccccgttn tatntttang acaataa
                                                                  57
<210> 3987
<211> 100
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
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<400> 3987
gcaccnaccg gtccggaatt cccgggtcga cccacgcgtc ntgaggtttt aagatgccgc 60
antaggattg gatgaatggg aaattntgct tgcnagcttt
                                                                   100
<210> 3988
<211> 108
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
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<222> (29)
<223> n equals a,t,g, or c
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<222> (59)
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<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
antatctaag acacccagac ncatgcggnc tgtcccaaca gctgccgcac actaaatgnt 60
                                                                    108
gaangagacg gcaccctgac caagtcagtt acagaaccgc tnagaatg
<210> 3989
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
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<222> (80)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<400> 3989
tgagtctatg ctaatgaagc ctgtaacgcc ttgcaggccc attgggaagg agaanggncc 60
                                                                    104
cagancatct gttaccccan aaacaggggc nctatatttg agcc
<210> 3990
<211> 85
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
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gaagnccagn acaccattct tgtccttacc cagtttcctc gccctncacc cctccagctt 60
catgctcagn gtngtgctta ataaa
<210> 3991
<211> 66
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<400> 3991
gcgccaagnt gtccnagctg gaggtcgtcc tgcatcagac ccaacaatga catggcccgn 60
                                                                    66
canctt
<210> 3992
<211> 128
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<400> 3992
ggaacccccn tatagggttg ggggacgctc ccnggcgccg gacggccaca ccgggacggc 60
ngacgcgaac ggcgcgtcca ntnctcaccc cgcgacgagg gcntgtgcgg gcagcaccca 120
                                                                    128
gggaggtg
<210> 3993
<211> 144
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (138)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (144)
<223> n equals a,t,g, or c
<400> 3993
tenececeta taggittigeg ggaegneeeg gaatneeegg gtegaeceae gegieegaea 60
ctcttgggct tacggttgcc aggaagcctt tcccctccag aagacttgcc tgttagggac 120
                                                                   144
ctcgcctnnt ggggancntc cctn
<210> 3994
<211> 384
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
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<222> (151)
<223> n equals a,t,g, or c
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<222> (152)
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<222> (269)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (283)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (292)
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<222> (323)
<223> n equals a,t,g, or c
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<222> (337)
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<221> misc feature
<222> (353)
<223> n equals a,t,g, or c
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<222> (364)
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gctcgtgcaa tggngtgcgg gctggaaaga ttgctgcagc agggacatcg ctgcctcctg 60
gcttaatact tgaacatttt gnatatattt ctgtgtatat aattgatgtg cagnaccaat 120
gacaaaaata tggtgtcata atagaaccag nnnngtngat cttttagnta tgggctcaaa 180
gaatctattc atctctaaca tgatattgga aaataatgga tgaaaatagg naaaatgatn 240
gcaatgctga ctgagggtct taaaaggtnc tggaaagcag tangttcatt tntctaaaaa 300
ctataacatt ctggaggagt atnttcttcc ttacgtnaat acttttcctg cantatttga 360
aatngtgggc tggggagaaa cagt
<210> 3995
<211> 141
<212> DNA
<213> Homo sapiens
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<222> (5)
<223> n equals a,t,g, or c
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<222> (8)
<223> n equals a,t,g, or c
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<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (26)
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<222> (75)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (141)
<223> n equals a,t,g, or c
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tgacnagngg acaagatcgg gntcanagaa aacgggcacg acagcaccag aacatggggg 60
aaatacgcca gattngagga ggccaagctg aatgaaaacg gagacgcagg atgaagaaca 120
                                                                    141
cactgcagac canngagagn n
<210> 3996
<211> 516
<212> DNA
<213> Homo sapiens
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<222> (311)
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<221> misc feature
<222> (391)
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<222> (417)
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<221> misc feature
<222> (459)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (465)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (478)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (491)
<223> n equals a,t,g, or c
<400> 3996
gatttctaac cccctttcct cctaatatgt ttatgtcata attttggcta gattagtgta 60
tacgatttac ataattatta ctctgtaaat gctttttatg atctctgagc catgtagtat 120
attatggcta tttttctttc ttatctattt gtatttttat tgttattacc taaaaaaaa 180
ttttctatgt cttatcacta attcttccct aaaatttccc acaattgtgt aaacttacct 240
cagtatattc atagatatga gacattctat caattttacc ctcttaaaga tgcagagata 300
atgcattatg nttcatccca ccatctttaa tgagaagctt ccatcttaga ttaatattag 360
agaatgttaa aatactctgc aatcaggtaa nggacgcttg aaacttcatt ataatgnaaa 420
aggttttctt ttaacaccat aaatattttg aaccctttnt ggggncttgt attcatangg 480
                                                                   516
agtttagaat ngacccttta ttacctattt tttaaa
<210> 3997
<211> 68
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<400> 3997
ggantaagaa aaagaaaaag aagagaaaga gtcagaagga acgtgataaa gaagtaagcg 60
                                                                   68
atgatgag
<210> 3998
<211> 405
<212> DNA
<213> Homo sapiens
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<223> n equals a,t,g, or c
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<222> (17)
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<221> misc feature
<222> (24)
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<222> (33)
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<222> (123)
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<222> (146)
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<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (244)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (346)
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<222> (383)
<223> n equals a,t,g, or c
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<222> (384)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c
<400> 3998
negecteace ttggaaneet tetnetatag gtnaagetgg taegeetgea ggtaeeggte 60
cggaattccc gggtcgaccc acncgtccgc tctggtctcc cagcacctgg cccaggtaac 120
agnettetga aageagagee aagganetge ntetetette teecagttet aceteeceag 180
aagcetteet eeceaggtgg ggetgatgga geaagggtee agactaggag eetteeacee 240
cagntgtgtc tggcgcccct agatctctgc aagggaggtg ttacagctgg atctgagccg 300
cttgccttgt gatggtaaga caccaacctt tacattcttc cctgangttg tggctgacag 360
                                                                   405
agcctgcttg gccccactcg tannccancg agctcctata tcana
<210> 3999
<211> 138
<212> DNA
<213> Homo sapiens
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<222> (1)
<223> n equals a,t,g, or c
<220>
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<222> (3)
<223> n equals a,t,g, or c
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<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (125)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<400> 3999
nenctanagg aaagnttegg actataggte aagetggtae geetgenggt aeeggteegg 60
aattcccggg tcgacccatt cgtccggatt tttccttttc ggatactagg ggatgaatng 120
                                                                   138
ggaanntaaa gngaaaaa
<210> 4000
<211> 83
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<400> 4000
gggaatnttc aatttaaaaa tgagtaaatt canggncaga ttgaatgccg ttcagttttn 60
                                                                    83
tggaatgaat gacattngca ggt
<210> 4001
<211> 154
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (75)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (95)
<223> n equals a,t,g, or c
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<221> misc feature
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<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (149)
<223> n equals a,t,g, or c
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gncatagtta caatgcaagt aaactggata ctagttcttt tgncagatnt gttaaatgca 60
tgcagaataa tatcntgaag agtattgatt gaagnttgtg atattcatca ataaaaatga 120
gntgataata tgcanaaaaa aaaagccant aaaa
<210> 4002
<211> 648
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (267)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (547)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (589)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (602)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (603)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (609)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (638)
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gaaattatqc qqctgcacct tgccaggtac aatggtaagg aaaactaaag ggagatctag 60
aaaccagcct gacatattaa agagggcttc tgcagaggtg agcttagtct gaattatgga 120
agaactttcc aggcagatac aaatgcaaag gccctgcagt gtgaggagct aaccacaca 180
aaggatggag agcagttcat agtgactgga gcccagggtg cagctaagga gctggagagg 240
gggaaaggcc ataccaagga gagcctnatc caaagagttt ggaccattaa aggattctag 300
gaagttcaag ctggagacag caaggaagat gtattggaag tgggtgagag agggtatgga 360
agatggttaa gacactcttg gagtaatcaa atgaaaaata atgaaggtag aaactaaagc 420
agggataaaa aggatggcac tgactctaga ttgttgagtg aaatagatgg catttgggga 480
caatagatta cagtctaggg agaaggattt gagactagga taatttccca gtctcttaaa 540
tggtgangtg attggtgttg cccctgagta ccgaaaggaa gggaagttna ggaatgggat 600
                                                                   648
cnnatttana cagttgggat attttgaatt tggatgtnta aggaaccc
<210> 4003
<211> 452
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (216)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (232)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (242)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
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<222> (311)
<223> n equals a,t,g, or c
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<222> (387)
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<222> (403)
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<222> (437)
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<221> misc feature
<222> (442)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (451)
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<400> 4003
gatttaaata ttggcttttt ccagtgagct attatgttta gtgtacagtg aaaagtttta 60
atattatagg ttaaaatttt cttaatcgtt cttttctatt cgcttgccaa gggtgaatga 120
aagaacatgg ctgcttctcc cagactgact gaccttggca tccgcataaa gcatcattgc 180
tttcaaaaat gaagggtgct taattgntcc cttttntcta tattctgtag gnctcatnac 240
ancaaactgc antctacagc ttcttaaagg tcagcgtgtt aacctaacat atnacacagc 300
aagaatctgg ntgtctgaac tattttaaat taaggagcca gatgttttta gtcaggctat 360
tctgaccaga cttgacctaa acttccnttt tattggcata acnggccaat ataattcttg 420
ggccaatttg gccaacngga cnagaaaaaa nc
                                                                   452
<210> 4004
<211> 180
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c
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<222> (170)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (178)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
<400> 4004
ggttgaaagt catggaacga ataaagtgtc agatttaggg ttaacatttg ggtctgtttg 60
actictaaagc ccatgitictt totgotactt totgitactt ottocctagi ottitaacagt 120
aatcgttcaa ctgtgattaa actttgcctc tctggaaaaa aaaananaan aaaaaaanna 180
<210> 4005
<211> 527
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (451)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (465)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (474)
<223> n equals a,t,g, or c
<220>
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<222> (480)
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<220>
<221> misc feature
<222> (486)
<223> n equals a,t,g, or c
<400> 4005
gaatagattg aaagcctctt agtgcaggaa gcaggcatca gtatcaaact gatgtcatcc 60
aatqtaatta ttttaaqctc caggtttgtc taagtttggg tgaagaatgt tcaggaacat 120
gtttgcaaca tacagttatc cagcttaccc tttgacagat tcacccttct catcaaaata 180
cacagtaagc ccaacctaaa aattataagt ttacaaataa aggaatagaa aaacccaaaa 240
agctaatgta cacataaaaa ttatcttttg ctgcaataaa taggtatgga aatatttgta 300
gaattggttt aactgatttt gtaaaacaaa tgtcatgcta ttttgccata gtgagacatg 360
cagtagttct taaaatcaca ttaatagaag gcaagaacat tggaatcaga cttaacagat 420
acagattcag tgataatgac cattgactaa natacttagg aactnctgag aacngatgtn 480
                                                                   527
tactgnctcc gtccaactga tgacttatgg gtatagataa tggattt
<210> 4006
<211> 159
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
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<220>
<221> misc feature
<222> (97)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c
<400> 4006
gggaangccc ncaggtaccg gtccggaatt cccgggtcga cccacgcgtn cggttgtgtc 60
ctntagttga gtttctggcg cccctgcctg tgcccgnatg tgtgcctggc cgnagggcgg 120
ggctgggggc tgncgagcca ccatgcttgn ctgaagctt
                                                                    159
<210> 4007
<211> 123
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
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<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (102)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (110)
<223> n equals a,t,g, or c
<400> 4007
gtgnagggnt tngggaacgc ccccaggtac cggtccggaa ttcccgggtc gacccacgcg 60
tncgtatttt taaatttggg caacccttna gtgcaaggaa tnaaantagn actgatttga 120
                                                                    123
cag
<210> 4008
<211> 142
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (107)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (125)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<400> 4008
gcttctanng gaacgctntg gataggnctt ntggggaacg tttcccggta ccggcccgga 60
attcccgggt cgacccacgc gtccgggatc aagacttgga accgcanaaa acgaaatccc 120
                                                                   142
atagnagnac aaagnntggc tg
<210> 4009
<211> 132
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (110)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
<400> 4009
actantggaa aggcctatng ggaaagtttc cccggaaccg ccccggaatt cccgggtcga 60
cccacgegtn eggnttetec tgttteteet tntgeteetg acceaegtn ettgetettg 120
                                                                   132
gngcccctat tg
<210> 4010
<211> 528
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (396)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (422)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (501)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (503)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (505)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (517)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (526)
<223> n equals a,t,g, or c
<400> 4010
actactttgn ttaggtggna ccgccccgca ggtaccggtc cggaattncc gggtcgaccc 60
acgcgtccgc ntntttattg gagcaatcca aaatagcagc tgnccaacaa tacaggaata 120
cagaagacag tttgaatcac actcattttt tctgaaattt tcaacttcat agaaaggcaa 180
ttgagtttag aatagagagg tatttgtgtc atgatgaata accatgatct catccataaa 240
aagaaggcca tatggtcttt cagacaagaa agaattgtat acctgaaatt aagtacaaag 300
```

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cagtatacaa ataaatagtt gagggaagaa atcagtgaga gttaaaaatag taattataaa 360
gtggtgagat tgttttcagt ctcattgtna tactgnttac cattaacacg ggccataaat 420
gnatataaat gttgagtttt agaaagatgt ataatatgta ttattttaca tccttttaac 480
atatgtatat gtttcaagtg ntnanccaat ttatatnggg tgcaanca
<210> 4011
<211> 268
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (159)
<223> n equals a,t,g, or c
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<220>

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<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (209)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c
<400> 4011
gccccgtacc ggtccggaat taccgggtng gacccacgcg tccggcacan ttnntctnac 60
gcccgaattc aaatcctgta aggatggaag aaacggcctg gagaatattc gggatgagac 120
accacttgta ttttgatcna atcagacctn ttttgacctnn anttacaggg caagattctt 180
aatgaaaaaa gaggttcaga gatgatgana nagacacgat atttggactt tctgtgggcn 240
                                                                    268
atnacttgtg aaacgtccat tcnaactg
<210> 4012
<211> 340
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (336)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (339)
<223> n equals a,t,g, or c
<400> 4012
gggtggtttt gccttttttt atttgggagt ttatttttta ttttcttctt gacctacccc 60
ttccctcctt taagtgttga ggattttctg tttagtgatt ccctgaccca gtttcaaaca 120
gagccatctt ttacagatta ttttggagtt ttagttgttt taaacctaac tcaacaaccc 180
tttatgtgat tcctgagagc agtatgaggc ctgcaagaaa gtgatcatat aattgtatct 240
tcactttctt tttatttttg tattacattg ggatgcattg tcatgcatat tttttgtaga 300
                                                                   340
ataaattctc ctttgctata aaaaaaanaa natnanatna
<210> 4013
<211> 385
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (279)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (318)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (335)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (379)
<223> n equals a,t,g, or c
<400> 4013
gggaaatttt ggcggtggta actatggtgg tggtgggaac tataatgatt ttggaaatta 60
tagtggacaa cagcaatcaa attatggacc catgaaaggg ggcagttttg gtggaagaag 120
ctcgggcagt ccctatggtg gtggttatgg atctggtggt ggaagtggtg gatatggtag 180
cagaaggttc taaaaacagc agaaaagggc tacagttctt agcaggagag agagcgagga 240
gttgtcagga aagctgcagg ttactttgag acagtcgtnc caaatgcatt anaggaactg 300
taaaaatctg ccacagangg aacgatgatc catantcaga aaagtactgc agcttaaaca 360
                                                                   385
ggaaaccctt cttgntcang actgt
<210> 4014
<211> 353
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (176)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (226)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (320)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (332)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (352)
<223> n equals a,t,g, or c
<400> 4014
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ggacagaatg tgctgcantg tttctgatcc aatgattcaa gtaatgtcat caagaacctt 60
gngaacccgc ctncacaccc caccccttt tcaaccacaa cattggcatc atnctaaggc 120
tggctaccct cgtggtcatg ggatgattgc cagtagcagt tggagccttg tgcatnttca 180
tttacatgca ncggaagagt caggctggat tctaggggcc ctgtnntaat atganaangc 240
ttttcccagg aatttactgg ttcatatcct taggtctcat tgctctatag taacttagac 300
ctgtcatcct ganccantcn ctggcaaagg gnctagaata acctttaagg cng
<210> 4015
<211> 67
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<400> 4015
gctcaaggtc tcctccttcc ctccccccc cccccgtga gannctttta aaaataaana 60
                                                                   67
antgtan
<210> 4016
<211> 92
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (84)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<400> 4016
gagccantag aattgtgctt tgtgatccag ggctcttggn cagaacagcc ttctngctca 60
                                                                    92
ttaactcagt caaccaaatg cttnctgngt tt
<210> 4017
<211> 103
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (86)
<223> n equals a,t,g, or c
<400> 4017
tacctnactg ctgctgtcgc aactccctgg tcnggactct gatgtncagt cggatggatg 60
gggaatatan cattgaactg tgttgnttac cttcactatt cgg
<210> 4018
<211> 227
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (173)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (177)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (186)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (206)
<223> n equals a,t,g, or c
<400> 4018
tegettgegg tacegtgeeg gnaceggtee ggaatteeeg gntegaeeca egegtnegge 60
ccttcctcca ttgttgccct ggaatgtacg ggacccaggg gcagcagcaa gtccangtgc 120
cacaggcatc cctgggacat atgaagctgg gagcaaggaa agggtcttag tcnctgnctn 180
ccgaanttgc ttgaaagcac ttgganaatt gtgcacgtgt catttat
                                                                   227
<210> 4019
<211> 101
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
ncctaactct atgtgcacct ggagtangat aatnaaaatc ctgantgctc tctttgcctt 60
ggtcctgttc tcaatggtga cgactgccac cacnacatgc n
                                                                   101
```

```
<210> 4020
<211> 107
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (95)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<400> 4020
tacaanaata tgagtaagcg gagcgactcg gttaagggaa agcaccgata tnactcggct 60
                                                                    107
ttctgctgnc nttcgtggca gagggactcg gaatnatgca ctntaag
<210> 4021
<211> 129
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<400> 4021
gtatnacatt anatctacaa nacttccatt nattaggaag cacattaacc atttntatag 60
catgatatct taaagatgga ggcaaaagga tataaattct ataatngact tgagnacttt 120
                                                                    129
aanccttgt
<210> 4022
<211> 57
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<400> 4022
gctcaaggtc tcctccttcc ctccccccc ccncacgtat tcanagnggg ngncttg 57
<210> 4023
<211> 180
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222>(4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<400> 4023
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tatntggnac neengeeegt aceggteegg aattneeggg tegaceeaeg egteegattt 60
tgtcctacct gcattctgta aaaattgaaa aaagaacaat tgaatccatc attgggcaga 120
tgaataaaag gagataagga tgaaattaaa ataaggttct aatcctaaaa aaaaaaaaa 180
<210> 4024
<211> 347
<212> DNA
<213> Homo sapiens
<400> 4024
gcaaatatta agaaggttta ccactcatag atccttacta aaagagatat tataggatgt 60
tctttaggaa gaaaaaataa atactggagg aaagagtagg ttaaaaaaata acaagaaaac 120
ataaagtata attcattatt tttcgtaaaa aatatttttc ttacaaatgg taaaactaaa 180
tctctagcca tcaataataa gatgggtgct attttacggg tagtaaaagc atgataaagt 240
ctttagtaag ttagggaaaa gaccaaaatt aggaaatgat tctgtacagt attaaaaaaa 300
gacataaata tatatgtcaa agtgttaagg ataactagta aaaaaaa
                                                                   347
<210> 4025
<211> 375
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c
<400> 4025
ggccaaggta tttcttgtgc ttttgggatc ttatgctgtt tgnaaaatgt tactgtccaa 60
tgttggatta ttgttttggt ttcaggcatt tgctgaatag gtgatgatac atgggtattt 120
ttctgcaagt atttaaacca ggggcatatg caaaggcagt tgtaatttcc tcttggaaaa 180
agegecaaat gtttgaaggt taaaateaaa tgetagggtt gatatttagg ettataacaa 240
aataggettg ttttcaaage agttttttcc tagagtttta actgttaact cactagtttg 300
ctgctgtttt taactatgtt aaataacata tggtatttgg caaatagatt tatttttcaa 360
                                                                   375
aatgaaaaan aaaaa
<210> 4026
<211> 121
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<400> 4026
ccgggtngac ccacgcnngc cggccgagct gatctgtaaa ncgctcagga ataagtanta 60
cgagggggg gatgggtgta agacaattgg cccggggaga aagagggnct gannaaacgg 120
                                                                   121
<210> 4027
<211> 229
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (186)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<400> 4027
nngaaacact gtctatanta acggactgga ccgtatgacg ggngctaacc cgggccacgg 60
tgtagagacn atgctactcg atgacgctgt gagaccggac taaatgggag tggagaacgg 120
gttagggtgg acgcttgaag atgagcatta tatcacaaca cngtaatgaa acctggtgcc 180
catgnngacc cgaagacttg tntcttcagc atgcatgggc cttcnaata
```

<210> 4028

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<211> 72
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<400> 4028
gttggaatgc gntcggagca cttgctctga ggaanaccat agtgactctg tcgaagaaga 60
                                                                    72
atccggncnc an
<210> 4029
<211> 595
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (201)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (286)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (323)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (577)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (579)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (583)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (584)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (590)
<223> n equals a,t,g, or c
<400> 4029
gctgaaatgc atngtgcttt catcaatgaa ccttttcaaa cttttctatg attgcagaga 60
agetttttat atacccagca taacttggaa acaggtatet gacctattet tatttagtta 120
acacaagtgt gattaatttg atttctttaa ttccttattg aatcttatgt gatatgattt 180
tctggattta cagaacatta ncacatgtac cttgtgcctc ccattcaagt gaagttataa 240
tttacactga ggggtttcaa aattcgacta gaagtggaga tatatnattt atttatgcac 300
tgtactggat tttatattgc tgnttaaaac ttttaagctg gcctcactta ttaaagcaca 360
aaatgtttta cctactcctt atttacgacg caattaaaat acatcaatag atttttaggc 420
tgaattaatt tgaaagcaca atttgctgtt ctcaccattc tttcaaggct tttcattgtc 480
aaaggtaata aaaaaggtag gacaattaaa gtgaaaaaaa aaaaaaaagg gcgggccgtc 540
tagaggatcc aagcttacgt acgccgtgca tgcgacntna tannctcttn tatag
<210> 4030
<211> 119
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (8)
<223> n equals a,t,g, or c
<220>
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<222> (42)
<223> n equals a,t,g, or c
<220>
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<222> (61)
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<222> (97)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<400> 4030
ctccccangg tccttatgca catgtggact gcactgaaaa gngccnttgg attgaatcat 60
natgatetat gagaggeate eateetggat ttggaanage teaaatenga agttaceag 119
<210> 4031
<211> 522
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (418)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (481)
<223> n equals a,t,g, or c
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<220>
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<222> (506)
<223> n equals a,t,g, or c
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<222> (508)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (514)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (518)
<223> n equals a,t,g, or c
<400> 4031
ctccgactta cttttaggga accgctggta cgcctgcagg taccggtccg gaattcccgg 60
gtcgactcat ncgtccggag caaactgctc agcgcgtctc agctcagtgc cgaggaggag 120
gaagaaaaac aggccgagtg aaggtgctgg aaagggaggg aggacgcgag gggaaaggcc 180
tgtggggagc cacgggcgtc agagagaccc gggaaggaag gctctcgggt gggggagcca 240
ggagacetge teteeggege agacaggegg ggeecagege teteetggae geeceegeee 300
gcacagetee eggegggtge tetgaggeet cactactega geccaeceag catecegege 360
gcccttcctt cccgaggaac tcgcctcagc ctgatcaggc ttcctggtga gaactganga 420
gcggactcac ttgatgtttc ctggaagcag agcaaaatgc tcttgtcctt gtcgcgtctt 480
                                                                   522
nattttgccc atgtcccccc gtgcancngg ttcnattngg tt
<210> 4032
<211> 352
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<220>
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<222> (54)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
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<222> (98)
<223> n equals a,t,g, or c
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<222> (295)
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<222> (308)
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<222> (314)
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<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c
<400> 4032
gccagaanct gcagatccag aatgttcaaa gaaagagccc tccttgcctt cctnttcttc 60
caccctgcc ctctgcagac tggggttctg tanacccnca aagtaagtcc gccacaccgg 120
aaggaagtga gttacacagg ggcccacatg ggaaccgctt tttgtcctgt cttggtggga 180
aaatggccac gaccccagcc caggetetge cacgccacaa etecacggge atageetgtg 240
aggccgcagc gtgaactgtg actagggctg aggatggtgc catggtaaaa gtganggcct 300
ggcaccongt caantgoatg aattottngn agtggggttg ggaaaaacac ct
<210> 4033
<211> 132
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<400> 4033
gcaggtaccc ggtccggaat tcccgggtcg acccacgcgt tcggcgctta tcagcatccn 60
gtgacngneg gtgctgengn ctaacacaca cctaatgaca gacaccaaca gccatacgct 120
                                                                   132
tggggagccc gg
<210> 4034
<211> 275
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
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<223> n equals a,t,g, or c
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<221> misc feature
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<220>
<221> misc feature
<222> (147)
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<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (217)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (269)
<223> n equals a,t,g, or c
<400> 4034
ggaaatccct taagctggtt cgcctgnagg naccggnccg gaattcccgg gncgacccac 60
gcgtccgaaa gatagcaang ataatagcgg tggagaccca ccngcacaaa tgcacccaag 120
agacaagcca tttacataca gatattnaca gtcacacata gaaacaccca catggacaca 180
aggaatgttg ctgcanagac tgaatgacat gcaacangtg aaggnttata cggtatacac 240
                                                                    275
aangccaggt aagcgctcat aaatcacana caata
<210> 4035
<211> 243
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (4)
<223> n equals a,t,g, or c
<220>
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<222> (5)
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<222> (6)
<223> n equals a,t,g, or c
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<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (178)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (212)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (242)
<223> n equals a,t,g, or c
<400> 4035
gaannntcnt cgggaanacc cctactatag gtaacgctgg tacgcctgca ggtaccggtc 60
cggaattccc gggtcgaccc acgcgttcgc ttattgattc cagacccatt tcagcagact 120
```

3667

gtgacacttc agcgacctgc aaattctaca cattagagtn catattttat acaaactncg 180

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tacacctaag atgtggactn aacatttcta cnaacaacat ccaacttcaa caaaagatgc 240
                                                                   243
ang
<210> 4036
<211> 251
<212> DNA
<213> Homo sapiens
<220>
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<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
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<222> (173)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (244)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (245)
<223> n equals a,t,g, or c
<400> 4036
gcttanttag tctggctcaa gtactttgtt tacaatnaaa atggatatta tagcatttaa 60
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3668

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tagaagaaat ggntatggct tatccaaaaa gaatgtcagc atgacctggt gtagacttaa 120
aaaactacat gtttgtgaat attttataat gtggaatgat cattgaaata ttnaggattn 180
tangtaattg tatttcctga ataaacgtat gttcatgaat tttctaactt acatcttgta 240
gtgnnctctg c
<210> 4037
<211> 175
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
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<220>

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<221> misc feature
<222> (144)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
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ttggaaanan cncactatan ggttaagctg gtacgcctgc aggtaccggt ccggaattnc 60
cgggtcgacc cacgcgttcc gcgaccgacc ttcagcaggg ntgaggntac catgttctct 120
cgcgcgggta gncactgggc atgncnagtc tggacctttg cagagcgcaa atgga
<210> 4038
<211> 293
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
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<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (168)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (184)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (234)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (248)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c
<400> 4038
gcccggngtt ttcanntatt ctgcattnac gttgaccatt ttaccaagat gataaaacat 60
gcattatttt ctccatttta taatttttac agggggaaca gcgaagccag atgatttatt 120
agttattgcc ggtganaata caganatcct ttgaaacatt tgtctctnct agaattctca 180
tcanaccata tgcttctaac acagcactta acagtcatgg ggagtatgtg ggantaacan 240
atactegntt ccctgccana accacacata cacccacaca cttgaaanaa aaa
<210> 4039
<211> 87
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (81)
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<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<400> 4039
gaattntaag aagacaatca agttttatta gaaacaaaaa ccatgttgga agaccaacta 60
gagggaactc gtgccttata nnattna
<210> 4040
<211> 59
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<400> 4040
gnaaaatntn tgtgantaaa ttctctcttt gatcaataaa aaaaaaaaag gggcggncg 59
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<210> 4041
<211> 104
<212> DNA
<213> Homo sapiens
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<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
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<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<400> 4041
aaaaaaatac gngggnaaaa agccccaant ttttggggaa aaaaaccccc gcnccttggg 60
                                                                    104
aaacnttaat taagggggcg ggaaaaaggc cctggggggt gaac
<210> 4042
<211> 413
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (304)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (305)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (363)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (410)
<223> n equals a,t,g, or c
<400> 4042
gageetgaat aaaaacagaa atggacacat aatatgcata tteeatagte tttgggagge 60
tggaatgtgc ctgggatttg ggtctaagtg tatgcgtaat tcttacctca ctaaagaatt 120
tgccttgttt ttttcctttt ggtgagtgac taaaacgtct gggcttccct gtgtgcgtgc 180
tacagtaagc aagcagaggc tgtgcaaagg tgtgagcagg atcacgtgga atctggagga 240
tacatcttgg cttgcaaact gcctctgtct cctgngtggg actgttctgt ccttgcactg 300
ctgnnctgtg gttacctctt ggggtgtaag gttttgctta canggaacat actttgggcg 360
tanaatggat ccattgccaa ntctctgtgc tnagaaagaa aggtgcttcn gtt
                                                                   413
<210> 4043
<211> 112
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<400> 4043
tttcaccaag gagctatacn tgggccaaga cccggatact tatccgtttt naccttgnac 60
cctggaaatt gaatggnacg gaccctgatg antttcatta tgattgggca cg
<210> 4044
<211> 55
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
                                                                   55
ggttgcacat gattgtntaa gcatgctttc tttgagtttt aaatgggggn ntagg
<210> 4045
<211> 374
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (11)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c
<220>
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<222> (220)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (262)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (282)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (290)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (312)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (321)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (372)
<223> n equals a,t,g, or c
<400> 4045
ggctcagaac naaagatnag caaaaaaagt cttcagggta ggactgccaa catataggac 60
tttgtaatgc catcttcttt atatttctgg gacattaaaa ttcaaatctc tgttgaaaat 120
gaaaaatgta aaacttagtt gcaaacagta taganaataa gtgatgatga aatatttgtt 180
ttcatacaaa catgctttcc cattctaaat agatgctann tttctttttt ccttggctgt 240
aaataaaagt gccccaaatg anaaacnaan naaaagggcg gncgctctan aggatccaag 300
cttacgtacg engtgeatge nacgteatag etettetata ggtgteeace taaatteaat 360
                                                                   374
tcactgggcc gntc
<210> 4046
<211> 53
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<400> 4046
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53
gggggaagtt ggaaaaaaat gntattttta aattatggng ccccntaaca tng
<210> 4047
<211> 403
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (323)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (396)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (401)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (403)
<223> n equals a,t,g, or c
<400> 4047
gganaatttc acattaatat ttgctgacag ctgacctttg tcatctttct tctattttat 60
tccctttcac aaaattttat tcctatatag tttattgaca ataatttcag gttttgtaaa 120
gatgccgggt tttatatttt tatagacaaa taataagcaa agggagcact gggttgactt 180
tcaggtacta aatacctcaa cctatggtat aatggttgac tgggtttctc tgtatagtac 240
tgncatggta cggagatgtt tcacgaagtt tgttcatcag actcctgtgc aactttccca 300
atgtggccta aaaatgcaac ttntttttat tttcttttgt aaatgtttag gtttttttgt 360
atagtaaaag tgataatttc tggaattaga aaanantcga ncn
                                                                   403
```

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<210> 4048
<211> 535
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (447)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (481)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (499)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (514)
<223> n equals a,t,g, or c
<220>
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<222> (516)
<223> n equals a,t,g, or c
<400> 4048
gntctgntgg aaagggccag gcactcagaa gtatcccatg cttgaaattc ttaattttat 60
ctttgaattt gtgtttttta agtgaagtcc aatgggacag gttctcagtt gccctggccc 120
actegagetg ceetgggget tetecetace etecetgate ceaetettge ceaggeageg 180
ttgggattgc accetecgaa teteagggca gggtggetgg taccaeagca cattaggeag 240\,
gcaagtgggc aggggcctct cacctgtccc atccctgcag ggaagttgca atccattagg 300
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gctgtagtaa cggggagtct gacttctgtg ctctgctcca ggccgggaat tttgcactgg 360
gccttgtaaa tcatgtanat ggcacagggt gatgagtacc attattatcc ctattttata 420
aagagagtat taaagagaag taacttnacc aactgcaaaa atgtctatac atatatccca 480
natggattta aaaaactang cccggccatg ggtngnctca aacctggaaa tccca
<210> 4049
<211> 123
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (75)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<400> 4049
cgncncaccg ggccggaatt cccgggtcga cccacgcgnc cggaaaaaaa aaacattctg 60
cgaatgaaat atngnatggg gagaggttat aaaagacatt ngnaaaagcc caatttacag 120
                                                                   123
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<210> 4050

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<211> 252
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (197)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (205)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (220)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (249)
<223> n equals a,t,g, or c
<400> 4050
gaaatgettt ctaactggge ceccaactee geaceceagt tegeagtgag geeetgggtg 60
ggtcacctgc cctctctgga cttgtttctt caactggagg aggtccctgc ctatgctgac 120
attocattgt agaaaaatgg ggcctctggt gtctctttac caggggcaag tgcctctctg 180
cgggggagga aaagctnaag gttanctgtc ttaacccaan tgacttacca ggcctacnaa 240
                                                                   252
atgagtcant tc
<210> 4051
<211> 282
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
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<220>
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<222> (122)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (205)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (214)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (245)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (246)
<223> n equals a,t,g, or c
<400> 4051
gcacaaaact gattttaaaa tcaagttaat gtgaattttg aaaattacta cttaatccta 60
attcacaata acaatggcat taaggtttga cttgagttgg ntcttagtat tattnatggt 120
anataggetn ttaccaettg caaataactg gecacateat taatgaetga etteecagta 180
aggeteteta aggggtaagt etgangatee acangatttg agatgetaag geeceanaga 240
                                                                   282
tegtnngate caaccetett attttcagag gggaaaatgg gg
<210> 4052
<211> 143
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (100)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (105)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (127)
<223> n equals a,t,g, or c
<400> 4052
gatgcccact cactttaggg aaagctngta cgcctgcagg taccggtccg gaattcccgg 60
gtttgaccca cgntttcggc aaagcaaccc cctgcttatn cacgnggaca ccaaggcggn 120
ccacggngcg gggaagccca cag
<210> 4053
<211> 131
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (125)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c
<400> 4053
acceactact atttggnaag ctggcccgcc tgcaggtacc ggtccggaat tcccgggtcg 60
acccacgcgt ttgctgagat gagggtctta gcctacaggg ntttttgaaa tgaaaggagc 120
                                                                   131
tnagntannt a
<210> 4054
<211> 400
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (394)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (398)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (399)
<223> n equals a,t,g, or c
<400> 4054
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gcaacttaga agaaatcatt tagtgactta attctttcta aagatgaaat gggattgttt 60
tttactcgtc ttccttgtta aatcattatt taagccgttc ttattgacca attcctgaca 120
cttgattgtc tcctaatgct ttatccatca ccacctgggc tcctgcatcc tcactgtgga 180
atcaggcacc agccacataa tgttccagac aaagcctgga agggtgtgga cccagacgtg 240
gagtggagtg attctcttga cgtttacata tatctctgtg tctctccatc attccaaagc 300
taaatgtaca tgtttagaat aacttattt ataaactctt cgggagacat gttgagattt 360
                                                                   400
gaccgtaatg aangcccatt ttcctgaaaa aaanaannnt
<210> 4055
<211> 156
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (134)

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<223> n equals a,t,g, or c
<400> 4055
ggccnaccaa ccggttttgg ttggcncggc ccggcttggt ggggcctctt aaaggngccc 60
ttaacccaac cccttttcaa ngaaaagttc naaccctggt ggggcnaana tggttgggcc 120
                                                                   156
ttaccccttg gccnaatgcc gccaatgaag aaaagg
<210> 4056
<211> 374
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (266)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (299)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (309)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c
<400> 4056
gggacctgga gcccatcccg ggagccttgg acgctgtgcg ggagatgaac gacctaccgg 60
agtaaggaga gaggggggg ggcggagtcc tgggcgggct cctggctccc ggcggtaacc 120
gcgtccttct ccgcagcacg caggtcttca tctgcaccag cccctgctg aagtaccacc 180
```

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actgtgtggg tgagaagtac cgctgggtgg agcagcacct ggggccccag ttcgtanaac 240
gaattateet gacaagggae aagaengtgg tettggggga eetgeteatt gatgacaang 300
acacagttng aggccangag gatgacccca agctgggagc acatcttgtt tacctgctgn 360
cacaatcggn acct
                                                                   374
<210> 4057
<211> 193
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (154)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (168)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (173)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
<400> 4057
ggacgcgtgg gcggccgtga agtagcgttg gatgcgtgtg cctgtgtgtg tctggggtgg 60
gggtgagggg cgcgcgggc cgcgtgctcn agtagaaggg gccggagggc ggngagcggt 120
teggegtggt cateetggac cetggggget ggengggegg egtgtgengt etnggagggn 180
ccgaggcggt gga
<210> 4058
<211> 345
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (141)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (182)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (222)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (257)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (274)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (283)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c
<400> 4058
gatttctgga atggatttaa taggctgtgt ctaatgtaca aactgggtga gtcctgcctt 60
antgtgtcct gcccaccgg tacgcttcca ggatactntt ttcccctctg taaagatcac 120
tttcttctga tggccagtgt nantatgatg tcagtnaggt ctggggatga tgacagtggg 180
tnctgaaatt cacaggactg actcctcacc ccagtgcacg angattnctg tggcangacg 240
gtgctgctgt acctggngta ggancctaat catngaacca tcngctgtta cctcacatct 300
                                                                   345
ctatgctaca gaacatatca tgtctcaaga aggatttggt ggang
<210> 4059
<211> 397
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (301)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (361)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (387)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c
<400> 4059
ggtgagtatt aaatatttca gaagtgtgaa tttcatgtat ttgagctcct ctagttgctg 60
teggttttte ttetgetgee aacetgtgae teacaaatga etaggatete ttgttettta 120
attttagggt cttgttccag gactcaaatc agtaacttgg tgattacaag gtgctgaatg 180
tgttggtaac catatcgcaa tacacctcaa ggaaaaggtt cagattttta tttttaaaat 240
attttcattt ttttcttgaa ttntatatcc gtttgttcac tcgtacatgc ctagcctaca 300
naaggggata tatattatga aatggtcatt tttctgaaga gaatattttg cttgaaatgc 360
                                                                   397
naaggactga aagagatttg tangttngnt gattttg
<210> 4060
<211> 193
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (174)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (176)
<223> n equals a,t,g, or c
<220>
<221> misc feature '
<222> (182)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (193)
<223> n equals a,t,g, or c
<400> 4060
ttcggctgcc tgtacacctg ctgcctacat cttcttggca acaaagttac ctgccacagg 60
ctctgctgan cctatgtcct ggtcagtaat aactgaacag ttgcattctt ggctttggat 120
gctgtctgcg gacaatcttg ctgaggatct ctaccatatt ctgagcacac ggtntntttt 180
gntctaactt nan
<210> 4061
<211> 316
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (175)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (192)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (255)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (266)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (283)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
<400> 4061
gattggcaca tgggtggaca cggatctgct gggctctgcc ttaaacacac attgcagctt 60
caacttttct ctttagtgtt ctgtttgaaa ctaatactta ccgagtcaga ctttgtgttc 120
atttcatttc agggtcttgg ctgcctgtgg gcttncccag gtggcctgta ggtgngcaaa 180
gggaagtaac anacacacga tgttgtcaag gatggttttg ggactagagg ctcagttggt 240
gggagagatc cctgnagaac ccaccnacca naacgtggtt tgnctgaggc tgtnactgag 300
agaaagattc tggggc
<210> 4062
<211> 103
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
<400> 4062
gggaaaaaag ggccttgggg tttatccgtc tccttggcca agggggttaa tcnccgnggt 60
tctcnggggg aaaatatttc ncnccggggg ggttctgtat ctc
                                                                   103
<210> 4063
<211> 158
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (99)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (127)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<400> 4063
aatggcaaca cacaggaact ttgattagga aaacttgggc caggcacagg cagaagtcac 60
ttttcattca tccttgccaa cgtgtganct tcagaagant ggaaatgatg gactatcaac 120
                                                                    158
accttcngcc tacgactcaa ataanaantt gatgactt
<210> 4064
<211> 74
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
<400> 4064
ttttgggaaa aagcccccn ntttttgggg ggaaaaaaat ccccnggaac ttgcaaacgt 60
                                                                   74
ganttttttg nggg
<210> 4065
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<400> 4065
gctagaggag tttgtatcaa tttgtgagta ttaatgtcan gtnctaccag cactttgcca 60
                                                                    104
aaactgtcan agggacccgt ttctanagtg agtcccantt acat
<210> 4066
<211> 70
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
<400> 4066
gctcaaggtc tcctccttcc ctccccccc cccccgtca tatctttnt tngtttttt 60
                                                                   70
aaanttagga
<210> 4067
<211> 53
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<400> 4067
                                                                   53
gcggtttctg gntccgacgg tagtgggtag nggntctcgg gttgcgggtt gca
<210> 4068
<211> 202
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (158)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (174)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (181)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c
<400> 4068
ccngtgaaat tanngctntt ggggacatga aatatatgga gngataaatt atagaacaca 60
gtattccaag aataaagtac tettgaggtt cetteetgat teaceetggg gtacacacag 120
gtgcatacte cetgcetete acceatecag agaaaacnet ttgcantgae teangtecaa 180
```

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202
nagcactgct cttgggtgga an
<210> 4069
<211> 348
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (284)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (324)
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<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c
<400> 4069
ggtttatgga tttttaaaag tctcattagc aatgatttct gagttttaaa caatttgtgt 60
gtatgaatga acttccggca tttgggaaac ttaatctgct ccatggatat aattgtaatt 120
gttttacatg ggaatttaat acaaacctaa caatcaaatc cctctcatta aattttacat 180
tcattcacta taaatggact agattttaaa actcagaaac ctaaaaaataa gatgaagtta 240
gacaacttta gattttgtgt ggtgtgtaca tctatgtgca cagnatgtaa attatctttt 300
attggattgc ttaatagaat aaanaagtan aaatttaatt cctgngng
<210> 4070
<211> 115
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
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<222> (71)
<223> n equals a,t,g, or c
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<222> (95)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (97)
<223> n equals a,t,g, or c
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<222> (111)
<223> n equals a,t,g, or c
<400> 4070
agagnccaaa aaggccacgg gataaacgga cacccgacaa gagataaaca cagagataca 60
cagggaaaaa natanacaca gagagataca gaacncncaa ccggcagata nacag
<210> 4071
<211> 52
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
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<223> n equals a,t,g, or c
<400> 4071
gatggaagta atttagattt ggaanantca tacataaaat gattntagtn ca
                                                             52
<210> 4072
<211> 89
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
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<222> (83)
<223> n equals a,t,g, or c
<220>
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<222> (88)
<223> n equals a,t,g, or c
<400> 4072
gctcttcctc tcaggcgggc agggcttggg cagcggcctg agtctcagcg gacttgncga 60
                                                                   89
ccctcgagtt gaatcggntt gnngagcng
<210> 4073
<211> 100
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
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<221> misc feature
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<222> (43)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (78)
 <223> n equals a,t,g, or c
 <400> 4073
 gcaggtaccg gtccggaatt cccgggtnga cccacgcgtc cgnaaaagct tcgagctgtt 60
                                                                    100
gcgggngtga gtntgttntg ttgatgacca atggggaaaa
<210> 4074
<211> 52
<212> DNA
 <213> Homo sapiens
 <220>
 <221> misc feature
 <222> (17)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (20)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (29)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (38)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (42)
 <223> n equals a,t,g, or c
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<400> 4074
                                                           52
ggtgttgctt ttacggncan agctgactnt gttgaggntg angttaaaag tg
<210> 4075
<211> 256
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
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<222> (179)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
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<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (234)
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cctacaaacn ccatggtaat ncnactacaa cagggaaagc tggtacgcct gcaggtaccg 60
gtccggaatt cccgggtcga cccacgcgtc cgctcccca atgcaggcca cttctcctcc 120
ctcctctcta aatgtantcc cctctcctcc atctaaaggc aacattcctt acccattant 180
ctnagaaatt gtcttaagca acagccccaa ntgctggctg cccccancca agcnttgggg 240
ccgccatcct gcctgg
<210> 4076
<211> 171
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (144)
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<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c
<400> 4076
cttcaggagg aagcacattt aaatcatctt tcaagcactn tatttttttn gtncannaat 60
tcaaccttat tgatagaaga gaacttgcac cactccaaga actgattgaa aaactcacnt 120
canaagacag ataaaaggat gcanagcttn tgcaaattgg tcctnaaatg a
<210> 4077
<211> 331
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (169)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (174)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (197)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (279)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (283)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (310)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (315)
<223> n equals a,t,g, or c
ggtcagncaa nngagtcaag atttaagttt acaagaggct gaaactgagc aatcagatac 60
tttagataat aaagaagetg teateetaan ggaaaaacet eeatetggae geeagacace 120
gcagcettta aggeateant ettacatett ggeagtaaat gaccaggana ecangteaga 180
cactacctgc tggctgncca atgatgcacg tcagaggtcc acataataag aatggaggaa 240
agaaaagcct cgagtccaat cccgctggcg antctttgnc ttncatccca tttatagagt 300
                                                                   331
cctctgatgn ccagnctgga gtgcaattgg c
<210> 4078
<211> 152
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
<400> 4078
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aggganaagn tggnacgccn gcaggtaccg gtccggaatt ccngggtcga cccacgcgtc 60
cggaggagcc gggctgatgc ggggctgctc agggcaggcc cnagggcgag ctngccatng 120
aggccaggca gcctncacct gtgctncagt gg
                                                                   152
<210> 4079
<211> 166
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (165)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<400> 4079
gatgnccant tgggncngaa ttccngggtc gacccacgcg tccggtactc cctaaatttt 60
ttaaaataca tataaatgct tgacattatt atacatgtaa gtggaataga aatagaaaca 120
gaaaataaat gcttcaaggt gttttacacc ntgaaaaaan aantnn
<210> 4080
<211> 100
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
<400> 4080
ccgtaccggt ccggaattcc cgggtcgacc cacgcgtccg ggatatctng ggggccatta 60
                                                                    100
gncagcctgc tatnaccatc agtcagcngg atntaatcaa
<210> 4081
<211> 136
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<400> 4081
tgactgnaat gaaaagaacg nggccttttt gcaacgcttg aacctgagat caaggntgtc 60
attgagcanc ttnaacctgg gcaccaccct gggttgcaac ttgcaaaaaa ccttcggatt 120
                                                                    136
tgggggatgg gnnacc
<210> 4082
<211> 277
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (199)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (217)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (223)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (240)
<223> n equals a,t,g, or c
<400> 4082
ggancttgta ctggnnggtc tccctgcncg tactcggncc ggaattcccg ggtcgaccca 60
cgcgtccgaa gaagcgaaat tttattctgg atcagacaaa tgtgtctgct tgcttgccca 120
gaaggagaaa aatgngcctg tnttcaggct ttccnncgaa aacttgttgg aagttggcca 180
aaagatgaag actattgcna aagacccagn ataaacntaa ttnaagggaa agactaccan 240
                                                                   277
acatgcggtc ttaaaatgaa aggaactttc ctccaaa
<210> 4083
<211> 415
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (323)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (346)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (402)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (407)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (415)
<223> n equals a,t,g, or c
<400> 4083
ggncgnggaa cttctaacgg gaanactcct atagggaant ctggtacgcc tgccngtacc 60
ggtccggaat tcccgggtcg acccacgcgt ccgcaaatta ttagtgtata actctgaatt 120
gaatttagat ctctttgatt ccaaggcttg ggatcttaca tgccccttta ttaggtagga 180
atagatactt catgaagatg ataacatgcc atctacagaa tatgatatgg cattgatgtg 240
acactttacc tacaaaatat cttatttctg agtcttccgc aagagaaaaa gcaattttat 300
ttttatggga caagattgga tgntacattt ttaatcaatt acatgnaagt gtattctacc 360
tttaaaattg ctatggaaaa gtttaattat ttccaacagg anttatnact atcan
<210> 4084
<211> 303
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (289)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (302)
<223> n equals a,t,g, or c
<400> 4084
tcaacnggca cggctcccng tttagnanct ggcccgcctg cangtaccgg tccggaattc 60
ccgggtcgac ccacgcgtcc ggccccgcag ctcctccggg agcccgctgg taactcgcgt 120
ccctcgcgct tctccggcgc ctgaggggcc cgcctcgggc catggtgctc tcccaggagg 180
agecggacte egegeggge aegagegagg egeageeget eggeeeegeg eecaeggggg 240
ccgctccgcc gcccggcccg ggaccctcgg acagccccga ggcggctgnc nagaangngg 300
ang
                                                                   303
<210> 4085
<211> 122
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<400> 4085
gnaaagttct tatgntagta tacatataaa tatcagtgtt ctgacatgta agaaaatgnt 60
acggtatcac acttatattt tatgaacatt gnactggtgc tntaatatga gcttnantat 120
                                                                   122
aa
<210> 4086
<211> 148
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
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3713

<221> misc feature

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<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<400> 4086
catgcagaga atatnctgaa gaantnaagc gtgactgctg gcgaactgtg acacgggtga 60
getegateae atenetetea tacateatte attnaageat ttetttagee caeggateea 120
gacccaantg ctntgtatgt gnagatac
<210> 4087
<211> 177
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (96)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (159)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<400> 4087
cggcccggaa ttcccgggtc gacccacgcg tncggtagga gtcaatgatn acatcctagt 60
nttaacaagn tacagataat cgctgactgg catgtngtct gcttctagct tggagctaaa 120
tgctgctcat gctgaaaaga ataatgncta tntctttgnn tgggtattag ctctatt
<210> 4088
<211> 317
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (305)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c
<400> 4088
tcactatatn tgagggcang gncncctgca ggtaccggtc cggaattccc gggtcgaccc 60
acgcgtccgg anttaggtct attaggataa ttaggagttt gancccatca acactattct 120
tgtagcagtt aggaatcttg agctattttt ttctcatacg attactatag tccagtttac 180
```

3716

```
caaagttttc tttagatgtc tgataatctt gagatgattg cttaccttaa aaggtataga 240
aaggatcact taaatatatg gaaaaatgaa ataagggtga agctgaataa agnnctactt 300
actgnattaa aaaaaan
                                                                   317
<210> 4089
<211> 548
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (327)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (392)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (415)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (477)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (478)
<223> n equals a,t,g, or c
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<220>

<221> misc feature

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<222> (510)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (519)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (547)
<223> n equals a,t,g, or c
<400> 4089
nagttcactg aaaactttta ctatatttga gcgctggtnc cctgcaggta ccggtccgga 60
attcccgggt cgacccacgc gtccgatggt gtcatttttc ctgcagagaa atttaatctt 120
tcactttaat ctttcattgg cctatagcag ccagtggggt cttttaaaaa attctttcc 180
ttcatattcc ccgtttgagc ttaaggtaca aaaaaagaaa atactcttga aatgctgtga 240
ccagatctag actgtaacat gccccttcgc tcctctggtg aggaagtgcg ggaaggtgga 300
agacattgag gggttgatta tttactncgt ttggaagtaa gaagggaggt agctcttatt 360
tggaataaga gctgncttca gaacaggtgt gngctctcct gaagcccaga gctgngactc 420
cctgggtgtg tctcttacct gtgcccttgg gcaagtggca cgggagaaga atacgannag 480
aggaggatgg tacagacaga ggagtcacan gctgaacang ctgtcaccgg ggcaagatga 540
                                                                   548
ctgacang
<210> 4090
<211> 51
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<400> 4090
```

```
51
getcaaggte teeteettee eteeceece ecceegtea ttnanntgne e
<210> 4091
<211> 402
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (370)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (375)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (381)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (402)
<223> n equals a,t,g, or c
<400> 4091
gattntcgcc agggccaata cttatccgca ggggtgtgtg ccaggcagcc caggtcagcc 60
tccctccacc gggccacccg caccaggttg cctcccatcg tttgcaggag cggaagaccc 120
gatggagcag gtttcacagt gccctcgctg ctgcctcccg tttcatctgc acgtctcttt 180
caatgcgggc gtgcgaactt ccaggtagag ccgagttcaa gaaaatgaag tactgcatgc 240
gacgagcaag tttattgaag agggtgtgag gtcgcggcgc ctgaccctca ttatgtcaag 300
ttactactaa atgaaattag aacttcactg ncctttttct ttttcccatc gaggtgcaag 360
aggaattgan cttanggtag nattttggga tttaaaaaaa an
                                                                   402
<210> 4092
<211> 214
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (93)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (177)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (208)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
<400> 4092
gnctggttca cagggaatct agttactata ttgaangctg gtacccctgc aggtaccggt 60
ccggaattcc cgggtcgacc cacgcgtccg aangactaca gagccccgaa ttaataccaa 120
tagaaggggc aatggctttt aaaataaaaa tgaaagggga attaaaacag cttaaangtt 180
                                                                    214
aanttaaaaa gtggnagggg aataaaanaa nttg
<210> 4093
<211> 98
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<400> 4093
agagggatnc tggaaaccct ttcgggantn aaggccaggt acccctgcag gtacncggtc 60
cggaattcnc gggtcgaccc acgcgttcgc taatccag
<210> 4094
<211> 146
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (138)
<223> n equals a,t,g, or c
<400> 4094
agacanaagt ggaattncgg aactacattg aaagcnggta cccctgcagg taccggtccg 60
gaattcccgg gtcgacccac gcgtccggtn gcatggggga aaatcgagtg ggnccaggng 120
ggcaancgaa gcaaggcntt ggcgtc
<210> 4095
<211> 279
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (258)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (263)
```

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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (274)
<223> n equals a,t,g, or c
<400> 4095
tgtatctttg taaaaaaaa gatctttata aacaatatat gaatgtgccg ncttatttat 60
tgattactgt aaattaagat ataaatggct atttgaataa tttatacctg tgggaattaa 120
ctggagtatt tgttatttga ctgttttcta ttaaggaata ttaggcttgg tgctatgatg 180
aatgatcttg taaaatcatg tgtattctta agaaaatttt tgaatataaa tttcttgaac 240
tgacaaaaa caaaaaanna atntataaaa tnanaaaat
                                                                   279
<210> 4096
<211> 281
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (178)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
<220>
<221> misc feature
```

```
<222> (240)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (241)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (258)
<223> n equals a,t,g, or c
<400> 4096
cgatatattt aaactttccc tctatattat aggttttgtg gcatncacgg tcaggtgtag 60
aggaagctgg ccccttgcag aactgtactg aaaaattttt aataaatatt ttcacaggac 120
tgaattgacc acaggggctt gtaataaaaa ttttnacact ggagctggga aaaccaanct 180
attgggggga aatcntccaa tttggaaagg nctacctttc atggggccac cctggaaaan 240
                                                                   281
ntgggaagtg ggttaatnag cctaattgaa ctttttccta a
<210> 4097
<211> 222
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (181)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (188)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (203)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
<400> 4097
```

3724

```
gcgaccatct caatgtcacc aagaaatggt cctaatcctg agtcgtcacc cttggatttt 60
atggatcacg gagctgacca tctttacctg gtcctggaac tgaaaaactg tagcttgtgt 120
gaaaatgagc ctttggacca gtctttatta aaacaaacaa acatgaaaaa naaaaaaaaa 180
natctaanaa aaaaaaaaa aanaaaaaaa naaaaaaaaa aa
<210> 4098
<211> 235
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (209)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (223)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (226)
<223> n equals a,t,g, or c
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<400> 4098

```
cgaatagacn tctntggaac gcctactata gggatgctgg tacgcctgca ggtaccggtc 60
cggaattccc gggtcgaccc acgcgtccgc ggacgcgtgg gagaatatgg gataagtagt 120
cangatcaga aaggtgagac aataaaaaca agatatattc caaagcctaa tcctaaattc 180
tgnttcaaat tctttatcat atttcaagnn ctttctcata ctncantgat cttgg
<210> 4099
<211> 66
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<400> 4099
gaaaaaaana agagatagaa taaaagggtg aagacagaaa aancaagagn aanatgaatg 60
                                                                    66
taatnt
<210> 4100
<211> 454
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (255)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (308)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (339)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (400)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (436)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (441)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (448)
<223> n equals a,t,g, or c
<400> 4100
gcaagcataa ggcaataaat acctgcagca acgtgggaga aagaagttgc tggaccagga 60
gaaaaggcag ttatgaagcc aattcatttt gaaggaagca caatttccac cttattttt 120
gaactttggc agtttcaatg tctgtctctg ttgcttcggg gcataagctg atcaccgtct 180
agttgggaaa gtaaccctac agggtttgta gggacatgat cagcatcctg atttgaaccc 240
tgaaatgttg tgtanacacc ctctttgggt ccaatgaggt agttgggttg aantagcaag 300
atgttgnnct tttctggatt tttttgccat gggttcttna cttgaccttg gacttttggc 360
atgattetta gteataettt gaaettgget eatteeactn tttntcagag caaetettee 420
```

3727

```
tttgggaaaa gagttnttca natcatanac cata
<210> 4101
<211> 66
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<400> 4101
gcccatnacc atcttncatg agctganatc ccttcaaaat caagaggggg cgatgcntgg 60
cagcta
<210> 4102
<211> 68
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
```

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<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<400> 4102
ggatcatcac ctgtaaagca gagctatatt aagccaagnn ncaggaagca gtagaangct 60
aatcttgn
<210> 4103
<211> 349
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<400> 4103
qqcctqaaqc acattqtcaa aqatqaaaqc tcttttqqqq aaaagggctc tccngtggaa 60
tcatcccttg tcatagcatg tggctctaaa ttttcagcct cattcacagt agcttgcatt 120
gttgtattgc ttttgggaca cctgtgtttt atctggaaat gtagacagga atagcggttt 180
tttttgtatg tgtattatat attgtttcac tgctaatctt ctacacaatt ttttagaata 240
aaaaagggta aatagcttgt gccattttgc taattacata gatttgactt ttgatcacat 300
                                                                   349
aaataaaaaa taaaacaagg caggacattg tcctgcacat agttgaaaa
<210> 4104
<211> 227
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
```

```
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (158)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (178)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c
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3730

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<400> 4104
gaacgctggt acgccngcng ggaccggtcc ggaattcccg ggncgaccca cgcgtccgat 60
cgaangcgcc gntgagacct cagccttgac ctccctcaga cgnggccggg accctgagcc 120
nctgcncaaa gccacccgcc ccgacgtact taggcggnat agccctgaga cctctggnca 180
gcgccaggca ngcancgggg gcgaaagagg cctgggnctg agacttc
                                                                   227
<210> 4105
<211> 147
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (127)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
```

<223> n equals a,t,g, or c

```
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c
<400> 4105
ctncagggcc cangttcgag accnaaaccc ccaggnagcc aaaacntctc ttgaaaagca 60
cagggaccga ccaggggaga tggggaggag atatggagtg agacacctgc tccagaagaa 120
gccagcnttc tctanncagg gngcnaa
<210> 4106
<211> 190
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
```

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<221> misc feature
<222> (138)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (175)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (189)
<223> n equals a,t,g, or c
<400> 4106
cgcccnagac cnncgtttgg aacgacctac tatagggaan gcnggtacgc ctgcaggtac 60
cggtccggaa ttcccgggtc gacccacgcg tccgaaaagt agccctcttt ctcctggatc 120
ttgctgaggg agnggctngg ggggtggggg agataaaaaa gaacttaaaa tgggnaaagn 180
                                                                    190
aagaaatgnt
<210> 4107
<211> 625
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
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<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
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<222> (26)
<223> n equals a,t,g, or c
<220>
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<221> misc feature

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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (231)
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<220>
<221> misc feature
<222> (349)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (425)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (504)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (542)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (546)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (609)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (619)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (622)
<223> n equals a,t,g, or c
<400> 4107
ctgtnagctn tcgnctatag ttttgngctn gtacccctgc aggtaccggt ccggaattcc 60
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cgggtcqacc cacgcgtccg gtctacaacc acgtaatatc cttttcatca gccttatgaa 120
attttccccc aatttatcca agtcaggatt tcagtatgca gaagtctaat gtcatcttgg 180
agagttcatt gtgcctcccc catatccaag accatttact aaaaccttag ntcagtcttt 240
aaagagtcac aagateetat tatgeetagt ttttttteea gtettttaag tetatteett 300
accttgccaa aaaagtacct gtttctatgg tttaacaaat ggagcttana atatggaact 360
atgacaaaaa tacctgctac atgcttcctt ctgtatgaat acatgagacc taccttcatt 420
catgnttcct ctatgaagct ttccctgcac tccaaacaca gagctgagac ttccacctaa 480
tgtagaaagc tagcacgagc cggngctgac agatggaaga cttgagatgg tacaagatta 540
tntatnggaa acacaaaagg gagatacccg gagccatgac agactgggat ggggctgggg 600
                                                                   625
ggacaggtna agcaagacnt tnata
<210> 4108
<211> 64
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
<400> 4108
ggttctagat cgcgagtggc cgcccttttt tttttgggntt tttttttttt nancataaaa 60
                                                                   64
cgnn
<210> 4109
<211> 56
<212> DNA
<213> Homo sapiens
<220>
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<221> misc feature
<222> (34)
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<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
 <221> misc feature
<222> (49)
<223> n equals a,t,g, or c
gctcaaggtc tcctccttcc ctccccccc cccnccggna tgtttnngng atataa
                                                                    56
<210> 4110
<211> 502
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
 <222> (230)
<223> n equals a,t,g, or c
<220>
 <221> misc feature
 <222> (304)
 <223> n equals a,t,g, or c
 <220>
<221> misc feature
<222> (313)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (426)
 <223> n equals a,t,g, or c
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<222> (430)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (453)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (468)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (498)
<223> n equals a,t,g, or c
<400> 4110
gtgttagaag gacccaaggg gaatggttgg aaggcatgtc atagaaggag aagataaaga 60
aagcccagat gatttttgcc tgtagaagag gagggctgat gggattcaac tgcctaagtt 120
tgtatctaaa tcttgtttta tggaattgag gttacatttt gtttgtatgg ctcttaagaa 180
cagaattcag atttctgcct ttgaaaaagg ggaaaccctt taccaattan gattattaaa 240
aaatggaatt tctctgcatt ttgagatagt aaactctaca ttgaagtatt ctgctacttg 300
ttanaaattt tgntcaaaac tttaagcatt aaatggggaa ttggtctgga tgactgttaa 360
gatccccaag agaatccaaa tttttgatct tagctgcaat taaagatgtt tataaatgct 420
taacanctgn totacctact toottattot tangatgtat tactattnca tatttaaacg 480
atcactcaag gaccattnaa tc
                                                                   502
<210> 4111
<211> 139
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<400> 4111
getcaaggte tecteettee etceeecee teceeegtet gggettnact teetttenta 60
cttggattct nctgctagct gcctcccatn atcttttttg gaggcccgtc tcttgctgtg 120
                                                                   139
gggaagantg ggctggctg
<210> 4112
<211> 377
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (141)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (329)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (369)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
gtaaccttag tangatagaa cttcatntgg nagggccagc tggtacgcct gcaggtaccg 60
gtccggaatt cccgggtcga cccacgcgtc cgtttgaatt tttgagttat caatgtactg 120
aagtetettt ntaatnttat ngggtggtte agtgnggtea gngeettgag tgttteaaga 180
tototattot ggattttagt ttagotttta ttgactntot aggttgtggc cattgcctga 240
aatacatgac agtgagctca cagaaacctt atactttgaa tttcacaaaa atcatataat 300
gttaggttct tgcttgcttt ccctttatnt nttttactgt caataaaata ctgatcctga 360
aaaaaaana aanaana
                                                                   377
<210> 4113
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<211> 530

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<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (281)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (385)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (398)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (447)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (468)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (484)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (491)
<223> n equals a,t,g, or c
<400> 4113
cgattaactg ccnatcatca cctcatttgc tttttttgac aacatactac tagaaaccta 60
ggctgtgagt gtaaaaccat aactgttaga atcatttttt tggcaatagc tcacattctg 120
```

```
ttaagagtca tttgctttaa tcaaagatca tgatttatta tatatttttt ataagtaggg 180
atggggccaa gattattcct ttggcacagc agtaagtgtg ctcaagatct ttgcctgtaa 240
gcttgaatat ttggcttaaa ttttgtgcat atgaatactg ntaaaggtat atttgactac 300
attttgaaag gaaaaaggta gtcctgctaa aattgacatt tagggatatt ttaatctatg 360
tatttqqtaa aqqtaattaq tgaangtatt aagttatnaa aattttaagg gaaaacattt 420
aaaaagcaaa atagtccgta tcagatnaat agaggtagaa taccactnna gattaaacaa 480
ggcnctggta ncaatgaagg ttgtcttgtt cagacgactg agatatttaa
<210> 4114
<211> 68
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<400> 4114
ggaaaagaga aagagaaaag gaattaattc aatcctggca gaantgattt atatnctgat 60
                                                                   68
tngancna
<210> 4115
<211> 211
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (174)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (193)
<223> n equals a,t,g, or c
<400> 4115
cgcgtggggt accggtncgg aatggccggg aagacccang cgtacgaaaa aaattatctg 60
ggttaataag ganatntata aaaggcncaa gaatctgagg actagatgtc ataaatatga 120
aataggtaaa aacaaggtca cnagaaaatg ggtanttaag aacttanctg gtgnggtaag 180
                                                                    211
aagcatacag aantggaaag gtaagaactt g
```

```
<210> 4116
<211> 101
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<400> 4116
aaaagaaaaa cntnaaataa ntgacttgat tttacacaac atccttccct tttctacaag 60
                                                                    101
ttaattnttt tacaaatcat tngggatatc tcctaaatag g
<210> 4117
<211> 440
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (75)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (284)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (402)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (414)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (434)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (440)
<223> n equals a,t,g, or c
<400> 4117
ggccatttct cacagaagat tnacactgga agctgatgaa aggatngaat aatggagagc 60
accactttcc tgcanctgat cacacagcaa acataaanca tggatngnca atntatttgg 120
aggcacagcg ctcccccggg gtggccaagc ttggaagtcc tgttcttaca aaattgctca 180
ctgcctctac cccatgtcag atcttataaa ggtgcagcaa gtgtggcaat aagcagactg 240
aggaaggcat aaagggtctg atgtgaagca nagaaggcag aggnggctga nggtttggag 300
taaaatcgag aatggccatg aagatttgac caaggagctc tgagattgag aaggaattan 360
aacgaagtcc acagggaagt tgagaaaatt ggcagaaaat tngaagagga gggnttcaac 420
                                                                   440
aggagatgat caanattaan
<210> 4118
<211> 69
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
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<223> n equals a,t,g, or \dot{c}
<400> 4118
gcaagtactg caagaaatgg caggatgagg gatggcaaga aagcagctgg naanaaaggg 60
                                                                    69
atttnanna
<210> 4119
<211> 196
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c
<400> 4119
gcgaggcgct gctggcgcag tggagccagg cacagctgag cgacggggag ctgggccgcg 60
aggtggacgc ctggctgcgc cgcgcccnag aacaagtacc ccgcggngcg cntgcgccag 120
nagntgcanc gcgtgtggcg cgggcacacg gacaaggtgt tggggctggc ccgggccctg 180
                                                                    196
tgggcccagg gacggc
<210> 4120
<211> 198
<212> DNA
<213> Homo sapiens
```

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<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (183)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (198)
<223> n equals a,t,g, or c
<400> 4120
ggggattgtg ggaggagccc ctgggggcct ggnctgtcct ccaccagaac ttggcattgc 60
tgccaacana ggatctgtgc ctcagctgaa gactagctcc ggaatgtcat aangggtgtg 120
actgtgtatg ccttctnctt cttctcgatt ntgtggcatg gcacaagttg gctgggtgct 180
ttnacctttc ccatggtn
                                                                    198
<210> 4121
<211> 93
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<400> 4121
aatteetntn tegateeacg enteegeaat gteenggean atagtaatta attaagaaaa 60
                                                                   93
tcgtgcaccc ttgttaccta gaatgcacgg atg
<210> 4122
<211> 52
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
                                                                    52
gaaaaaaaat agctgtncaa taagtagatt taangnaatt agaacacttt at
<210> 4123
<211> 338
<212> DNA
```

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<213> Homo sapiens
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (71)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (268)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (300)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c
<400> 4123
ttcctgggcg ancacgcgtc cgggagagct ccccttgcac cgtgggccnc agccagagaa 60
ggcctgggac naanacccac tggggggcct cccacggagc agccagaggg gcnaggctgg 120
gtgggggcc ggagcacctg ctgcacctgt attcagggtg gatttttaag naagatctcg 180
ttgtagecgt gtegetttee taccaggagg cecatgacat eeggetgtet etetggtaat 240
gttcatatca atgacggttg ttacctgngt cattatctca ctggggctgt nacnggggan 300
agtttattct atactttctt catttaccan ctgcaatg
<210> 4124
<211> 169
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
<220>
<221> misc feature
```

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<222> (137)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (161)
<223> n equals a,t,g, or c
<400> 4124
aacctantgc cattegggen tttntateag natettttet aattgngage atgtgtatga 60
gactatttat acccaaggat atgaaggaac ataatgtgac tacaaggctc taataagcca 120
cngagggcag gaggctnang cggttctgtt nactaaattt ntctcctgt
                                                                   169
<210> 4125
<211> 274
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (222)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (239)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (245)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (269)
<223> n equals a,t,g, or c
<400> 4125
aacattctat gcatatttgg ttgttatacc aattcatnaa tgaattcata aaatgactat 60
gaaaaaaatt atatgctatg ggatactggc aacagtgcac atatttcata accaaattag 120
cagcaccggt cttaatttga tgtttttcaa cttttattca ttgagatgtt ttgaagcaat 180
taggatatgt gtgtttactg tactttntgg tttgatcccg gntgtataaa tgatagcant 240
atctnggaca catttgaaat acaaaatgnt tttg
                                                                   274
<210> 4126
<211> 151
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (140)
<223> n equals a,t,g, or c
<400> 4126
tegggtttee eeggggaaaa ttteeceegg gggntteegg acceeenace ggeegtteee 60
cgnacncctt ggtttgggtt ttaaattaaa aaggtttttt tttcaacntt cttgggccaa 120
aaaaaaaaa aaaatntttn tataaaaaag t
<210> 4127
<211> 241
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (154)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (193)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (216)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (239)
<223> n equals a,t,g, or c
<400> 4127
gtcaggtgac ggcaggtgtc tnaccgctcg acneggecec tgccctctgg acgtgcgcgg 60
ctccaggtnc ccgcggccct ccgccacgcc agctctcncg gtcttagcaa caaggnggct 120
gaccgccgnn ccctgcagcg gctgatcccg tggnccctgc agacccagcc aacacccagc 180
ggtcccagag cgncccgcct gctacccgcn gtgggnggca cccgatggcc ggcgagggng 240
<210> 4128
<211> 286
<212> DNA
<213> Homo sapiens
<400> 4128
gaacctagta acctccagat cccagagget ctcctcacct cagctgaget cctttgaaag 60
tgattcaagg gactatgtca ctcagcctca tttgctggac caaatctgga gggagaaccc 120
ctaaaacccc taagtgaggt tgcccagggg gttgtcccca ggtgggggga agcaggggga 180
agaaaatggt agccattttt acattgtttt gtatagtatt tattgattca ggaaacaaac 240
acaaaattct gaataaaatg acttggaaac tgccaaaaaa aaaaaa
<210> 4129
<211> 151
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (104)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c
<400> 4129
gggccaaggg gtttaacccc cnggggttcc ccccggggna aanaatttnn ccccgggggg 60
ggttcccggg aaaccccccc aaaggggccc ggttttcccc cgtnaaaaac ccttttcact 120
tttggggggn ttntaanaaa aagaaanata c
<210> 4130
```

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<211> 149
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (85)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (96)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<400> 4130
nggangtgga aagctggtnc gcctgcaggt accggtccgg aattcccggg tcgacccacg 60
cgttcgagag tgtctaatcc tgcantcatg gcgcangaag aggaagatgc tananattac 120
                                                                    149
aatttgacct gaanaacata aggcgatca
<210> 4131
<211> 266
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<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (149)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (241)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (254)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (258)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (265)
<223> n equals a,t,g, or c
<400> 4131
gctgtatacn nttaagagat ttctgacatt tattcttaca ctaaatggat caactctagg 60
atttaggcat gttaacttct gtngtgtttt gaatctctcc agagttgcat gtagatagca 120
```

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```
tttatttctg tgcccttaaa cccatttana aaataactac aaagtaaaaa tgtagaggaa 180
atagaaatgt atttttcat gaacattttg atacaaattt catcatttaa tgattcacca 240
nagttctccg tntngtcnat tttana
                                                                   266
<210> 4132
<211> 132
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (106)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (110)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
```

<220>

<221> misc feature

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```
<222> (122)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<400> 4132
gnntttgatt anatnaatta gacntaatta aattagacgg tattccctaa aatgtataaa 60
tgtgtcactt tttaaatctg aaagccttct gatgatcaca atactntatn nggctataaa 120
                                                                   132
tnnaatccac at
<210> 4133
<211> 274
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (273)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (274)
<223> n equals a,t,g, or c
<400> 4133
gattgttgcc tttcaccccg agtttgacta gcagcaagcc tgtcaataaa tgtaacattg 60
gtttcactta ggtgctcttc ctggttttag aattccctga atgggcagtt tgacaggtaa 120
atgtggtcca aatcagtcgt tctttttacc acttaaaaaa aaaattttcc tttgtagttt 180
ttttgctgtc tccccgtagc ctaaattgtg gctgagctgc ctgaagcatt cctctgcttt 240
agaaaagaat tatccctagt ggcaaaaaan nnnn
                                                                    274
```

<210> 4134

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<211> 433 <212> DNA

<213> Homo sapiens

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<220>
<221> misc feature
<222> (95)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (97)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (350)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (393)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (396)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c
<400> 4134
gcgaactccc acctctccat ggcctgccta gccaggctgg cactgccact cacactcggc 60
```

```
cccagggccc aggagggaca gtgcctggag cctgngnnag gcccagccca tctgtgtgtg 120
tgtatgtgcg tgtgatgcta cctctcctcc cgtccctctc caggggcccc gcatacacac 180
ggccatgcac gcacacactg ggcctgggcc agggccccag agctcctgcc tgagctggac 240
cttatgcaaa catttctgtg cctgctgggt aggggcacgt ctgaagggcc ctgctccaag 300
cctgcaggac cganggccac aagccggaca agggggtagc ccctggattn agcacacgaa 360
caccacaga gcacgtgcca cgcatgcctt cgngtngctc attttacaca anaccccctt 420
                                                                   433
cccgggtnac gca
<210> 4135
<211> 63
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<400> 4135
gcggacgcgt ggggtttgtt taaaaggact gtcttttatt nataattgga ntgnaaatct 60
                                                                   63
ntg
<210> 4136
<211> 133
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<400> 4136
gactagttct agatcgcgag cggccgctcg cgactagttc tagatcgcga gcggccgccc 60
gcgatctngn tctagccggc gcgtgggtcg ncccgggatt tccggaccgg nacntgctgg 120
cgtaccagct atc
                                                                   133
<210> 4137
<211> 616
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (417)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (491)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (495)
<223> n equals a,t,g, or c
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<220>

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<221> misc feature
<222> (565)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (571)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (572)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (582)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (584)
<223> n equals a,t,g, or c
<400> 4137
gaactgnaag ccgaggcgga aaagatgcgg gtgtcccagc aagaattact ttctgttgat 60
gaatctgttt acactccaga ctctgatgtg gccgcaccac agatcaacag gaacctcatc 120
cagaaggctg gttaccttaa tcttagaaac tggcagatga gagccatgtg ctggagacct 180
acctgcaagg ccagaggcaa gcaaaacagg gctggtcacc accacctggg agaggcttta 240
tttcttcacc caaggcggga atctcatgtg tcagcccagg ggagccgtgg ctggaggttt 300
gatccaggac ctggacaact gctcagtgat ggccgtggat tgcgaagacc ggcgctactg 360
cttncagatc accacgccca atggaaaatc gggaataatc ctccaggctg agagcanaaa 420
ggaaaatgaa gagtggatat gtgcaataaa caacatctcc agacagatct acctgacccg 480
acaaccetga ngcangtege gateaagttg aateagaceg etetgeaage aagtgaette 540
cattacaagt tttgaaaaaa aaaanaaaaa nnggccggcc gntntaaagg atccaagctt 600
                                                                   616
tacgtacgcg tgcatg
<210> 4138
<211> 447
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (240)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (278)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (284)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (304)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (310)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (378)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (405)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (417)
<223> n equals a,t,g, or c
```

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<220>
<221> misc feature
<222> (441)
<223> n equals a,t,g, or c
<400> 4138
ccacgcgttc gcccacgcgt ccggtgtcaa ctaaattaat actgttgtta aaagtaagtt 60
gtggatcttg gtcactccac acaagctaga ttgtcttaat atttgtatgg tgcactttta 120
cttacaaaag ggaagataaa atgttttggg gaataattac caggggtctg gccaggtcaa 180
aattggttag tccccttctc ccatcttcta attttggtag ntaatacttg gtaaaacatn 240
gggtttttta ataactcact aaaaagggta ttctattntg gtantttgga taaaatgact 300
tgancanaan gttacagcac acgaaatttt cctttaagca aatngctctc aaatatagct 360
ttttgtcata tgcttatnca tgtttaagat gacatgaaaa ccctnacaac tntaatntta 420
                                                                   447
aaataaattt ttctttaata nggtatt
<210> 4139
<211> 389
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (181)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (308)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (373)
<223> n equals a,t,g, or c
<400> 4139
gtaaaatcat aatcgtggat taccgcatta aatagttcta aatcagtnga actgctaata 60
accettggtt atattgtatt etetgatata geattateag agaaaactgt aggaggaata 120
gtctctgttg acagtggtca aaggtagatt agagaatagt gggtttccct caagtctgaa 180
nctgacctac taatcagcac atgtgtgagg gaactgccaa ggcagagaaa gaattttcag 240
aanggaggag gatgacagtc tctggagctc aacacggcta agccatctaa attttctctt 300
tactttgngt tacatnaatg atgaattgaa attncaaatt cataaanaca gttatgattc 360
                                                                   389
tcaactacct gangttgcgt tcaacatca
<210> 4140
<211> 55
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<400> 4140
                                                                   55
gaatacgtaa aaaagtataa gggaagcant gcattcgann tactgcacta ttntc
<210> 4141
<211> 251
<212> DNA
<213> Homo sapiens
```

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<220>

<220>

<222> (47)

<221> misc feature

<223> n equals a,t,g, or c

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<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (172)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (204)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (219)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (233)
<223> n equals a,t,g, or c
<400> 4141
gctgcagatt tgtgttacag ttatttcagt atatgtcctg tccctgntaa tgtgtaggtt 60
tgtaataggg agatacattt catatcttct ttgttttatc catgctgcct gccanacagn 120
cttgtacatg gtanatactg aataactatc aaatgaataa gtagttatta anaccaagat 180
actttacaga naaaacttta ccancttctc taggactang accccaaatc tgngctcaga 240
```

```
251
gctgctagct t
<210> 4142
<211> 96
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<400> 4142
ggaanaaaag totttaatga tgaacatatt ttoccottaa gottaaaaatg tottgcottt 60
                                                                    96
gaatggtatc tnagcttaag gngaaaatan nattaa
<210> 4143
<211> 443
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (386)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (390)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (401)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c
<400> 4143
gggaaaatgc aaaagcacat atatgtttta atatctttat gggctctgtt caaggcagtg 60
ctgagaggga ggggttatag cttcaggagg gaaccagctt ctgataaaca caatctgcta 120
ggaacttggg aaaggaatca gagagctgcc cttcagcgat tatttaaatt attgttaaag 180
aatacacaat ttggggtatt gggatttttc tccttttctc tgagacattc caccatttta 240
atttttgtaa ctgcttattt atgtgaaaag ggttattttt acttagctta nctatgtcag 300
ccaatccgat tgccttaggt gaaagaaacc accgaaatcc ctcaggtccc ttggtcagga 360
gcctctcaag attttttttg tcagangctn caaatagaaa ntaagaaaag gntttcttca 420
                                                                   443
tttcatggct agagctagat ttt
<210> 4144
<211> 385
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
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<222> (280)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (285)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (368)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (382)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
<400> 4144
gntctaatta aaggtgcagc acttcaaacg tgatttatac agttgttttt ataggaaaat 60
ggaaatatat tgtagggata ggtagcagga cactaatagt gagtcccact catgactgta 120
agtagtgact ttgggaggta tnttaaatac tgatgtcatt aagtaattaa cttgaattac 180
ttgtatttta cttttagtta tcaagctgac tgctattata gtaaatatgt gtcttanact 240
tanagtgaaa tggaaactgc ttagaagctt aactgtgtan gagtnaaagt gcacgggaac 300
agatgggaac atttaantta tagaaataat tctggtggag ttctagggct ngtgcctatt 360
tgttttantt tgttgtgaag antna
<210> 4145
<211> 151
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<400> 4145
gnaagcatgt ttaatttnaa tagaagagag naaaggatat ggctggtcnt ggaacatcaa 60
gttgttcctt gntccaactg catgaaatgc tggagaaaat tanaacattg ctnnagagaa 120
                                                                    151
ttggcctctt tanaatcaat tgccccagga a
<210> 4146
<211> 436
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (433)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (434)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (435)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (436)
<223> n equals a,t,g, or c
<400> 4146
gtatgatttt ctgtgtatga gatcatggga tctgtgagta ggtagtttta cttttttctt 60
tcacatatga atgactttgt atatatatat atatttttt ttttctaatt gttctggatg 120
gaacttctag tacagtgttg aacacaatga tgaaagtgag catcagtgct gtgttcctga 180
tcttaaagct ttgggtgcca acaattcagg tggtgattgt tatgggtttt gcataaaggt 240
gttttatcat gtgaagaaaa ttcgaatctt cagcttattg gtggttttta tcattaaata 300
cgttgattat ctttaagtac tttctgtaac agttgagata aacgtgtttt tcccatcatt 360
ttaattatat agtatacgga aaaggaatgg ctttagtatg ttgaaaaacc tttgattttc 420
                                                                   436
tgaaaaaaa annnnn
<210> 4147
<211> 414
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (353)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (362)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (398)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (403)
<223> n equals a,t,g, or c
<400> 4147
ggtaacatgc ctttcacatg tccaccttct tgccatgttc cagctgctct cccaacctgg 60
aaggeegtet eeeettagee aagteeteet eaggettgga gaaetteete agegteacet 120
cetteattga geettetetg ateactecat eceteteeta eceeteete ececaaceet 180
caatgtataa attgcttctt gatgcttagc attcacaatt tttgattgat cgttatttgt 240
qtqtqtqtqt ccqatctcac aaqtatattg taaacccttc ggtgggtggg ggccatatcc 300
tagategega geggeegete tagaggatee aagettaegt aegegtgeat genaegteat 360
anctcttcta tagtgncacc taaattcaat tcactggncg cgntttacaa cgct
<210> 4148
<211> 442
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (295)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (390)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (413)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (417)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (421)
<223> n equals a,t,g, or c
<400> 4148
gaagccatag atgaggaccc atccttgact cctctccctc atcctccatt ttcagtcagt 60
aqttaqaaac cttcttqtta ttcctgtgaa cccatttact tgtcatctct ctactcttag 120
caccttaact tagactctct ttatttccca cctacctgaa tttcctaaaa gcatcatcca 180
cttttgaagg cttaggactt tgcgtatctt ccctcagggc ttagcttaga aaatcaggac 240
ttctctgacc tgttcctata ccctcaggtg agcttggtgc tgatgtcccc ttctncctct 300
teatecatae etetantett etteteeeg teteceatgg geteteacag eaccetgtge 360
tatccttctg acacatataa catttgcngn aatcgctagc ttttctgggt canaggncag 420
naactatgtt gactcatatt at
                                                                   442 .
<210> 4149
<211> 412
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (336)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (348)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (380)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (398)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (399)
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<223> n equals a,t,g, or c
<400> 4149
gaaaataatg taattgtaat tttgaaatgt ggttttcctg aaatcaagtc atctatagtt 60
gatatgtttt atttcattgg ttaattttta catggagaaa accaaaatga tacttactga 120
actgtgtgta attgttcctt ttatttttt ggtacctatt tgacttacca tggagttaac 180
atcatgaatt tattgcacat tgttcaaaag gaaccaggag gttttttttg tcaacattgt 240
gatgtatatt cctttgaaga tagtaactgt agatggaaaa acttgtgcta taaagctaga 300
tgctttccta aatcagatgt tttggtcaag tagttngact cagtatangt agggagatat 360
ttaagtataa aatacaacan aaggaagtct aaatattnng aatctttgtt aa
<210> 4150
<211> 497
<212> DNA
<213> Homo sapiens
<400> 4150
ggattgcact tcctgaccaa tcttattttg gagaaagatg gagacgataa tcctgtctgt 60
cgactgccag acttctaatt caatagataa cgttcttgag aaagacccca gaccaaaaag 120
agacacagat ataacttctg aaagtgacta tggaaacaga aaagaatgca atagaaaagt 180
tcctcgaaga tcaaaaatcc cttatgatgc caaaaccatt caaactatta agcaccacaa 240
taaaaactac aactettttg taagttgtaa tegtaaaatg aaaceaectt acettaaaga 300
attatatgta agctcatctt tagcaaactg tcctatgtta caagaatcag aaaagccaaa 360
gactgaaata attaaagtag accaaagtca ctcagaagac aacacttacc agtcccttgt 420
tgaacagcta gaccaagaga gagagaagag atggagagct gagcaagccg aaaataaact 480
                                                                   497
catggattat attgatg
<210> 4151
<211> 392
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (214)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (239)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (241)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (356)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (363)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c
<400> 4151
gaaagtatat aaatataaaa tgtataaatg atggatagat ttttgtattg atttgcaaaa 60
tgcagattat atttgatagg ctatagtatg tagatattcc ttttaggaat attacagctg 120
taaattatat gagacttgcc agtcaaatgc tatttggttt aaaaaaaatta ttgcaatctc 180
aagttaatgg aatatttta aatcccacat tcanagttta aaacactggt tttcaatgng 240\,
nctattagtg ttgtcacttg ttnatagata aatatataaa taacctgttt ggatcctggt 300
cctttttaac tgatccnttg gcaattctga gcatttattt gatgacttaa tatttntcac 360
tanctttgga gaacanatga accatttntt ca
                                                                   392
<210> 4152
<211> 71
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<400> 4152
gtgcttttat aaagttgaac aaattgaatt tagacattca ggcaaagcta ctgggggttg 60
                                                                    71
nntnctncna c
<210> 4153
<211> 509
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (401)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (448)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (482)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (486)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (494)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (496)
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<223> n equals a,t,g, or c
<400> 4153
gccctgacat tacaggaaat ctacttagca acctcgtaag tgagaacaag tctaaaagca 60
qataaaatta attatcctag atcctagatg caacttttaa cttggcagtt attcccacag 120
cattlctgtt tggtattctt acaattgcct tacactcaga attcttacta aggggccatt 180
accatagtag atattacttg gcaaataata aatacaggga ttgagcaagc tgatgtaatt 240
gactgtcttg atttaaaatg tgtattaaac ttagatctac agaatggtag ggaggcagaa 300
acaagcaaat gacttaattt gtattgatgc caaattggtg cttgcttgag cgcttcaaaa 360
tagcagagtt gttaacacta gctacaactc taaggaccat nccataagta gggcacatag 420
ggaatttgaa ttcataccag aattttangg attttatttt accttctaat atataattaa 480
                                                                   509
gntctnattg tggngntaac cctttttt
<210> 4154
<211> 453
<212> DNA
<213> Homo sapiens
<400> 4154
ggcgtttagt gtgttctaat tttaattgtt ttatatcctg aaaccaatgg tgaaaagtaa 60
tttcattgag ggtacctttt caatgcctga gtagcataca gaatcatgat tatgagactt 120
tcttttatct ttctttataa aaatatgtgt ttttttttgt tgaaagtttt ggtctcttta 180
aattcagatt ttgtcttagg acagtaaaac ccaggttgac tgactcagga aacagttgtc 240
tgctagtcac tcataaatgt acggtcatat gttcactctt cttaaatatc caccttttat 300
aacacaaatg taaaatagta tcagtctagc caatgatgaa ctctggaatc cacttagtct 360
tcagtaagta tgtgctgtcc tctaaacttt gccctgaagc caggggatct tctcctaatg 420
                                                                   453
tatgtgacat aaaaatccat tttccatgta aaa
<210> 4155
<211> 169
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (104)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<400> 4155
ggccttaaaa aaaatgnttn ttaaagactt tggaaccaag gttggangga atttantgga 60
aaaaactttg gaaaaaaagg aagggtncaa cttcaataat nnanatagaa cagaaagttt 120
                                                                   169
aancttggct ggtgggtaaa gaagaagaat ggccagttat tgaaatatg
<210> 4156
<211> 172
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
```

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<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (68)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (141)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (172)
<223> n equals a,t,g, or c
<400> 4156
cacgaaaaac atctactact atctntcaag ccagtanatg ccaaatttct ttntgatcan 60
tagtgatnta caactcaagt gccatgttgc tctacaggtg cactgctata acgacagcat 120
ttccagaatn gcatgttctt nnattgtttg tgtcgcactt atatganatg tn
<210> 4157
<211> 485
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
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<220>

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<221> misc feature
<222> (408)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (439)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (450)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (472)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (484)
<223> n equals a,t,g, or c
<400> 4157
tagactntga aataagtgaa atgactggtc actgatcatg atgtatatct gttacataca 60
taatgatttg tagactgaag agctagcagt atagtttgta ctccatgcca ttattcacag 120
atactatatt gaagtttgaa ctgtgttgct ggcagactgg cattatttag ctaacctgtg 180
gtaactgaaa ttcctgcatg tcagaattct gcaaagtaag gactacctgt atctatatat 240
ttttttctct aagcactgct ttagttttat ctcacaaatt ttgacatttt gtgttctcat 300
attaattaaa ttcaagttac tttctaattc ctcttttgac tttctcattg acacataggt 360
tattttataa gtgtgtttaa ttttctaata tttgggggga cttctganat gtctttttat 420
tatttatttc taattaatnc cattatggtn ggttaatata ctctgaatga tntccattct 480
                                                                   485
tatna
<210> 4158
<211> 324
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (304)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (306)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (315)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (318)
<223> n equals a,t,g, or c
<400> 4158
gcctcagtgg acgacatgct caaggtgagc tcccgggtgt caagcggagg ccttttcctc 60
caggacgacc ctgtaggtac caggagggt ggggcagggt tgagcccttc gtggtctggt 120
tggccagact ccacatagcc cagagctgac cgcttgcccc aaatcaaagc atcttggcca 240
ggtcagactc cttgaccagg actgccattg tggttaaaaa ttagccttgt gtggtggtgt 300
gttncntgtg gtcnnagntt actt
<210> 4159
<211> 134
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (118)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
<400> 4159
cnnttaccaa caggtnagcg cacgctgaat ggcgaatgng acgcgccctg aagacggagc 60
attaaaacac ggcaggaatg naggttggtt acaacacagg gtgacccgct acantacncc 120
                                                                    134
atacgngcta acag
<210> 4160
<211> 84
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (84)
<223> n equals a,t,g, or c
```

```
<400> 4160
gaaaaggatc aaaggatatt gaattcccgg tccgacagaa agaggtctat atcaanagag 60
                                                                    84
tngtngatcn ggcaaaagat cttn
<210> 4161
<211> 310
<212> DNA
<213> Homo sapiens
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<222> (165)
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<222> (240)
<223> n equals a,t,g, or c
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<222> (279)
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<222> (298)
<223> n equals a,t,g, or c
<220>
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<222> (304)
<223> n equals a,t,g, or c
<400> 4161
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ccencnegte egggacatga atagtegeca ggettggegg etetttetet eccaaggeag 120
aggagatcgt tgggtttcaa ggccccgcgg gcatttctng ncggncctgc ggagagagtt 180
cttcactacc acaaccaant gagggatatg ataggcngtc agtggatata acttctttan 240
aacaaaggaa attaactttt gatacccatg cattggttna ggacttggaa actcatgnga 300
                                                                   310
tttnacaaaa
<210> 4162
<211> 126
<212> DNA
<213> Homo sapiens
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<222> (11)
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<220>
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<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<220>
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<222> (125)
<223> n equals a,t,g, or c
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tectacggea ngntetaata egacteacta taggeaaagn tneaaegeet geagttaceg 60
gcacgaaatt cccgggtcga cccacgcgnc cgctcaataa atattctcat tgtcaatcac 120
                                                                   126
ccnana
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<211> 145
<212> DNA
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<223> n equals a,t,g, or c
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<222> (87)
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<221> misc feature
<222> (131)
<223> n equals a,t,g, or c
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<222> (134)
<223> n equals a,t,g, or c
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gagatnacna agggaacgtc atcgttngga aagcgtcggc aataagacgc acactgttgt 120
                                                                    145
gccgtcgctg nggntctaag gccta
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<211> 230
<212> DNA
<213> Homo sapiens
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<222> (13)
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<222> (123)
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<222> (220)
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gtcagccttg gtgcctggct gccagccaca ttctataccc tatttggggg tgaatggtgc 120
annytttete etgeangtat gtteecetga etettetttg eececeagaa tatgetttag 180
                                                                    230
ggagtcncag acnacagaac actgccccan ggcgctgtcn atcactctat
<210> 4165
<211> 135
<212> DNA
<213> Homo sapiens
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<222> (24)
<223> n equals a,t,g, or c
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<222> (33)
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<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
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tatgaccatg attacggcaa gntntaatac gantcactat agggaaagnt ggtacagcgt 60
gnaggtaccg gtccggaatt gccgggaacg acccacgcgt acgatttana tgctgctggg 120
natgttaatg anaga
<210> 4166
<211> 130
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (16)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (19)
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<221> misc feature
<222> (43)
<223> n equals a,t,g, or c
<220>
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<222> (59)
<223> n equals a,t,g, or c
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<222> (117)
<223> n equals a,t,g, or c
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ctgtgcagnt accagcacac atgcaaagcg gaaaggcgac ntttctaggt gcccgangca 120
atacaagcat
<210> 4167
<211> 119
<212> DNA
<213> Homo sapiens
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<222> (2)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (15)
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<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (107)
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<220>
<221> misc feature
<222> (115)
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tntaatacga ctcantatag ggaaagntgg tacgcctgca ggtaccggtc cggaatatcc 60
cgggtcganc cacgcgtccg tgggattttt ntgtgttact tttggcngta ttttnaaac 119
<210> 4168
<211> 171
<212> DNA
<213> Homo sapiens
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<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
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<222> (61)
<223> n equals a,t,g, or c
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<222> (83)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
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<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (168)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (171)
<223> n equals a,t,g, or c
<400> 4168
cataacaatt ttacacagga aaacagntat gaccatgatt actggcaagn tntaatacga 60
ntcactatag ggaaaggtgg tangcctgca ggtaccggtc cggaattccg agggacgacc 120
cacgcgtccg ctttgaatna gagtcgaagg ttaaaatgag agangnanga n
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<211> 169
<212> DNA
<213> Homo sapiens
<220>
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<222> (23)
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<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
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<222> (62)
<223> n equals a,t,g, or c
<220>
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<222> (68)
<223> n equals a,t,g, or c
<220>
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<221> misc feature

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<222> (131)
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<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c
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gnaggtancg gaccggaatt cccggatacg acaccacgcg tccgagagag tgtgcttgct 120
cagagacntg nagccantca ganacaggat taaatggtgc tgtgagttn
<210> 4170
<211> 169
<212> DNA
<213> Homo sapiens
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<220>
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<222> (28)
<223> n equals a,t,g, or c
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<222> (138)
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<222> (156)
<223> n equals a,t,g, or c
<220>
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<222> (164)
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aacaggtatg accatganta cggcaagntn taatacgact cantataggg aaagntggga 60
cgcgtgcagg aaccggtccg gaattccagg gtcgacccac gcgaccgaaa gtgtatgtag 120
tatataaaga atttggtnta tgantgnaga atcaanataa taanatgta
<210> 4171
<211> 160
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (25)
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<220>
<221> misc feature
<222> (52)
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<223> n equals a,t,g, or c

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<220>
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<222> (53)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (76)
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<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
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<222> (112)
<223> n equals a,t,g, or c
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<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<400> 4171
gaaacccaag gaaagccgtt cggtnaaggt ccggtccgga attcccgggt cnncccacgc 60
gtccggtgta tcctgnttta aaaaaatgta nttttttttg aaataaacct tnatattctg 120
tatatttnct aaggggggng agaacctttt gaatgtgtca
                                                                   160
<210> 4172
<211> 258
<212> DNA
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<222> (72)
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<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (175)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (180)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (236)
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<222> (240)
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<223> n equals a,t,g, or c
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tatagggaaa gntggtacgc ctgcaggtac cgggccggaa ttcccggntc gacccacgcg 120
tncgttctat ttcttttgac aaatnngaac atttctaaaa ctaaaagagt ctttntattn 180
ttaaaacaca agtagaatga tttaaatagg attttaatga atttttggca agtggntgtn 240
ttaantttta aattgaga
<210> 4173
<211> 150
<212> DNA
<213> Homo sapiens
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<222> (17)
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<222> (34)
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<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (45)
<223> n equals a,t,g, or c
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<222> (79)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (104)
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<222> (129)
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<220>
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<222> (147)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (150)
<223> n equals a,t,g, or c
<400> 4173
gctctaatac gactcantat agttgattgc tggnacgcct gcanntaccg ggccggaatt 60
cccggatcga cccacgcgnc cgaattgctg gcagccattt atgntaaaaa tgcatatatg 120
cattctgtna ggaagacttt atactgntan
                                                                    150
<210> 4174
<211> 201
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
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 <222> (142)
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 <220>
 <221> misc feature
 <222> (164)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (165)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (172)
 <223> n equals a,t,g, or c
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 <222> (190)
<223> n equals a,t,g, or c
 <400> 4174
 nacgcctgna ggnaccggtc cggaattccc gttcgancca cgcgtccgcc cacgcgnccg 60
 catatttata gcttatcact taattttgtg tgccagggaa ggcatggcca gaattaatat 120
 gccacagtac cctcatcatt gnttttatag ccattcatgc cccnncttcc tntggcacat 180
 tttctaagan attatttcat a
 <210> 4175
 <211> 131
 <212> DNA
 <213> Homo sapiens
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 <223> n equals a,t,g, or c
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 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (19)
 <223> n equals a,t,g, or c
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<222> (56)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (111)
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<221> misc feature
<222> (120)
 <223> n equals a,t,g, or c
 <220>
<221> misc feature
<222> (123)
 <223> n equals a,t,g, or c
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 tgattacnnc aagctctant acgactcaat atagtgattg ctggnacgcc tgcagntacc 60
 ggtccggaat tcccgggtcg acccacgcgt ccgcccgtcc ccgtctctcg natttgtggn 120
                                                                    131
 ctncttggct c
 <210> 4176
 <211> 181
<212> DNA
 <213> Homo sapiens
 <220>
 <221> misc feature
 <222> (8)
 <223> n equals a,t,g, or c
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 <222> (51)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (59)
 <223> n equals a,t,g, or c
 <220>
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<222> (72)
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<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (149)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (178)
<223> n equals a,t,g, or c
<400> 4176
aaacagenet gaccatgatt aegecaaget etaataegae teaetatagg nattgettnn 60
acgcctgcag gnaccggacc ggaattcccg aatcgaccca cgcgtccgct aacaggccnc 120
atacttaaga ttccatctac tttaagttna aaggattttn agaatnacct taagtgcnaa 180
                                                                   181
<210> 4177
<211> 296
<212> DNA
<213> Homo sapiens
<220>
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<223> n equals a,t,g, or c
<220>
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<222> (7)
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<222> (11)
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<222> (31)
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<222> (85)
<223> n equals a,t,g, or c
<220>
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<222> (118)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
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<222> (141)
<223> n equals a,t,g, or c
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<222> (149)
<223> n equals a,t,g, or c
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<222> (163)
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<222> (221)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (239)
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<221> misc feature
<222> (247)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (257)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<400> 4177
naaccgncaa natgcgacaa atccccgaaa ntttggggtt aagggcacgt accgcgtccg 60
quatteccgg gtegacccae gegtnegegg aegegtgggg ecetgtteeg ttaccegnge 120
tacctcagcg gctacnagac nacactggnc ctgggcccgc tgnatgagtc accctgtgtc 180
cacgccacgc ccccgctgag cctccccag aacctcacag ntgaagggac aggcaaccnt 240
ggagccngcg tgtcagncat ccgggaactn ttcaacttct ccagctgcca gggcca
<210> 4178
<211> 166
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (42)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
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<222> (137)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (154)
<223> n equals a,t,g, or c
<400> 4178
cacacacac tattattatn attatgtttn caagttcagt tnttagactg atcattcaca 60
aagggtggtt ttcagtntgc tgagatcttg nttttctttt tgtgttcaca gatgaagccc 120
ggggcaagaa ctgtggngnc ttggtacatt gctnggctgg cattag
<210> 4179
<211> 297
<212> DNA
<213> Homo sapiens
<220>
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<223> n equals a,t,g, or c
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<222> (16)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
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<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (159)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (181)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (236)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (238)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (253)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (290)
<223> n equals a,t,g, or c
<400> 4179
tncctcttcc acgagnaccg gaagatgngc acatgcgagc ctggggctgc ncgntgaagg 60
gactacttgc ttcgaaccgc tagacagtga acaaaggaac ttgatagctg ncctggacca 120
ggacgtcttg gcacaacctt atccggaatg caactacanc tacnccatag aacatcttac 180
nccccatcaa ntgagntgag ggggcgcaac ccgggttggc cccattggca acccangncc 240
tttagtagtc ccnccccca aaaaaanccc tttaggcatt tccttgggcn aaaatcg
<210> 4180
<211> 128
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (114)
<223> n equals a,t,g, or c
<400> 4180
ttngnggact gggtgtctct ggtcgaactc tgtccaaaaa cgtgcatggg atataacttg 60
anaagettge cacaattgnn gtataaagea tgtggecata cecaatttea ganngettac 120
caatagag
<210> 4181
<211> 403
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (362)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (386)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (395)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (397)
<223> n equals a,t,g, or c
<400> 4181
gagaacaata ctgtaagggt aagaaggata gatttctttt tctattgact gctgaggacc 60
gaagetetag aatgtetaac agtteageca ggateacata ggaatattee gatteagagg 120
cagaaatctg tggtctgcac tatgctttca ggtcagatta gaggctcatt ccttttgaca 180
ccatgccatt gtgagettec aaaacaagat ccgeteteag gcaageetet gaatgggtta 240
caaagttcaa aatggagcca agcacaagaa gagttgccaa gagtgataca gaacgctctg 300
tgggaagetg ntgtggaaaa teageacace cagegeetgt agtaatttaa ecaatacage 360
                                                                   403
anaaaaacgt agcttgcgtg tttttnaaaa aaccntncac aga
<210> 4182
<211> 174
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (23)
<223> n equals a,t,g, or c
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<222> (31)
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<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (118)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
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<400> 4182
 caggtacgcg ggccggaatt cnngggtcga nccacgcgtt cggcgttcna tccgctggaa 60
 ggagagnaat caggaaaccc attgatagga ttatcgccag gcatgacctc tntcaatngc 120
 cactttctat tcttttgaag tagaactntg gagcnacagg gcnacagacg gcgg
 <210> 4183
 <211> 581
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc feature
 <222> (1)
 <223> n equals a,t,g, or c
 <220>
<221> misc feature
 <222> (6)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (523)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (527)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (539)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (560)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (561)
 <223> n equals a,t,g, or c
 <400> 4183
 nggttntcac attcaaaggg aatgagattt gaaaatgatt tctttgagtc ctctgctgag 60
 gtctttccaa ggcactacaa ttagggcttt gcacccaaat acccttgcct cattttggtc 120
 attttgtcct ggaacagagg ttcagctggg agacccctca cacacaggtg aaggcgtggc 180
 tgtagaacct cagacccct ggtctcctca ggaatgaagg tcattgccat cctcacctc 240
 ctcctcttct gctgtaagta gagagcttgg tgggtcagca ccaagcttct gtcttcctgt 300
```

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ttatgtcagt gggaggggg actctccagg tggcaccagg tgagggaagt cacaagtcct 360
gcagaaaaga atcaggaaag gaacgggctc ccaccaacgt cctcttgctt ctgtttctgc 420
tataaaatgg gctgatccca gtgttgggat cttataaagt gtctaggaaa tcagaggttg 480
ccaaccattt gctagaaagg gagtttgact actattttac ccncctnacc ctcaagagnc 540
                                                                   581
ttttttcctt tggatgctan nagcctttat ttaaggccat t
<210> 4184
<211> 76
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<400> 4184
gcggacgcgt gggattgaat aggtcagaag tagaatcttt tcaatagggn anaaagttgn 60
                                                                   76
ggtgnagagg antatg
<210> 4185
<211> 66
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<400> 4185
aacagcttaa gtccatgggt aatccgttna tagaaattgt gtttgctaan aaggtgccat 60
ttannc
                                                                    66
<210> 4186
<211> 156
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (30)
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<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (136)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (146)
<223> n equals a,t,g, or c
<400> 4186
gaaaactgtc ttcatatatt taaaagtgtn atcattttct taaaagttnt acaaaagctt 60
tgtatttctt atttaaaaaa tctttgcccc atttggtgaa gatattctct tatttgttnt 120
cntaaaaatt accttnatag ctntgntttt aatatt
<210> 4187
<211> 172
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (153)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (169)
<223> n equals a,t,g, or c
<400> 4187
gcttttgaat tttgttcaac atgatcaata ttacatgtta ggatcattca gatgtagtga 60
atgagagttt atagtggttt acttatttaa atatttgact tttaagttcc tcacaatata 120
tttcattctt ttntctnctg ttgcatggat anngcatata catacctana aa
<210> 4188
<211> 138
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (32)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (38)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (122)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
<400> 4188
cgaccgncgg ctgcggcntg gacggggcat gncatgtngc cattgactgc ggcgcggtcg 60
gccatgcagg actactntgt aagccccata ggagatcctt ggcgcacaat gctgcggttc 120
tncctcgngg gcttnang
                                                                   138
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<210> 4189
<211> 67
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c
<400> 4189
gactagttct agatcgcgag cngccgccct ttttttccct ttttacattt ttcttnttgt 60
ttatgat
<210> 4190
<211> 453
<212> DNA
<213> Homo sapiens
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<222> (12)
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<221> misc feature
<222> (41)
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<220>
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<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (96)
<223> n equals a,t,g, or c
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<222> (100)
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<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
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<222> (110)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (119)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (129)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (231)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (357)
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<220>
<221> misc feature
<222> (364)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (430)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (450)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (453)
<223> n equals a,t,g, or c
<400> 4190
tncttattga angatgagat ttacattttc aaagatgatt naaataattt tnnttaatgn 60
ctgcaaaccn ttggcttgtc taaggaatga acaganggtn tnaagggctn attaagaant 120
aaantgaant gacatttana aatatggaaa tccattaaga gtntttaagg agcttgggga 180
gaggagettt aataagaaaa gecatetgea ttgacageca agaaccattg nttetttgtt 240
gaaaactgac catttcaacc tgcacatgca gttgaggata agtttactga tcttgccaca 300
gatgagtttc aaacagaagg aataaggaaa acagtatcaa ttgtttccct ggaactncat 360
tcanatttca aggcgagtgc aatcagaaag gatgatttct acttgctggg ttgatttaat 420
                                                                   453
ccctttccan atgattgaca ttttctgctn ggn
<210> 4191
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (95)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
<400> 4191
gcccacncgt ccgcccacgc gtccgcttta gacgtaatac gtctaaaggg gatnggacca 60
tgatctttac ctgntgactc tggaattgaa taaanaaaaa ttnc
                                                                    104
<210> 4192
<211> 393
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (59)
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<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (172)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c
<220>
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<222> (216)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (221)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (230)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (253)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (262)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (264)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (267)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (283)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (286)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (292)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (310)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (359)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (386)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (391)
<223> n equals a,t,g, or c
<400> 4192
ttttccnttc agccctgaca acccatccac acacgggcan gcctgttnat ntacactgnt 60
gcccactact ctctccagct ncacatgctg tacctggatc attctgaagc aaattccgan 120
cattacatca ttgtgtccat aaatatttct aacatnctta aatatacaat cngaattcaa 180
gcatctccca ttgtnccaca aatgtttggc tgatgntgta nttgnattgn ttgtattagg 240
attaaagcaa ggnccatata tngnatntat tngaaatgtc tgnaantctc tntccatcta 300
cagagtttan canatttgaa cgttgctggt tgaaatcccg aggtgtcatt tgacatggnt 360
                                                                   393
ctctgaactt atctttccta taaaanggta nta
<210> 4193
<211> 267
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (149)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (222)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (243)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (249)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<400> 4193
ggtaacgtta ctgtattatt ctacgtaaat gtgggtactt ggatgtttat catactgttt 60
ctctgtgttt acatactaat ttgtgtaaga aatgcatttt agtctgtgta cctcaacctg 120
ctgtttgttt cctanaggtg ttagtantnt ttaaatacaa gtaagactta agaggatatt 180
tgatgttatt tacctggata ttttattccc cttttatnta tncacaggaa attgacattc 240
tangaccant aaaatgaana caaaatt
<210> 4194
<211> 301
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (139)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (192)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (201)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (228)
<223> n equals a,t,g, or c
<220>
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<222> (268)
<223> n equals a,t,g, or c
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<222> (275)
<223> n equals a,t,g, or c
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<222> (282)
<223> n equals a,t,g, or c
<400> 4194
gcgcctgtgt gtggaacctg caatcacact gggaagttga gttgggagga gattcctgat 60
tettacaege aettetteat atgtggttee eteetggnga teaceaggag gteeceaaaa 120
gtccctgatt gcagggtang tttgcagctc tgtttcagtc cattcttttg gggtagctag 180
gaggtgtcat tnactctgca ncatgatggc aggagcanaa gccacatntc ctccccaata 240
aatacctctg tctttcctta cgctaatnac aaaanaaaaa anaaaaaaaa aagggcggcc 300
                                                                    301
<210> 4195
<211> 110
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (42)
<223> n equals a,t,g, or c
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<222> (101)
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<221> misc feature
<222> (105)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<400> 4195
ngnacgnctg caggtaccgg tccggaattc ccgggtcgac cnatgcgtcc ggttatatca 60
                                                                   110
gtaataaaaa aaataacaga acccttaaag ggnatccaca ntgantggnt
<210> 4196
<211> 461
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (409)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (428)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (433)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (440)
<223> n equals a,t,g, or c
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<222> (455)
<223> n equals a,t,g, or c
<400> 4196
gccacgtgga gagaagttgc cctccaggcc gacaggaggc catgcccacc gcccctggac 60
aggettegte teagaagget etatetgetg ggetggegge cateceegtg ttgggtggae 120
cccgagcacg gttgcctgag gtccgatggc ccgagagctg ggactcagtt cttggcctgc 180
tageggetga acaggeegca cateteaett eagttgtgge eteatteage agatgaetet 240
ggaaccatcc tctgttaccc gcagatcctg tcccatgggc tctggcccca agatgttggg 300
gggccccacg gagagttgac ttggtagagt tcctttctgg gaagaaagta ggagtggctg 360
accaggeest geteateace eggatagagg acaeggaese ttgtgtggna ttttggeatt 420
ttggcttnaa agnccaatgn accattgttt gccanaaatt t
<210> 4197
<211> 376
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (101)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (120)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
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<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (194)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (201)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c
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<222> (248)
<223> n equals a,t,g, or c
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<222> (250)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (276)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (300)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
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<222> (315)
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<220>
<221> misc feature
<222> (331)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (369)
<223> n equals a,t,g, or c
<400> 4197
gcggacgcgt ggggagtggg ggagggaggt gtgcatacca ttttatatgg tgtgagagct 60
tcanaccaag ganacattta accatctctc cccctttcct ntggggtgac tgcanttgan 120
gaaagnatgc catggggtaa ggggacattg gtggncacat tttggtgaca gacccctgct 180
gttgtctctg tgtncccatt ntctggactn tggcctgncc tcctagtgct tgtgactccc 240
tctctttnan ccccacccc atggtatgta tattcnttac aagtcctcca caagagcagn 300
tgtctangat gcggngaggg gaggctcctt nccttaggga gcgtggatag aaaggagcat 360
acttgttgnt gtattt
                                                                   376
<210> 4198
<211> 65
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222× (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (63)
<223> n equals a,t,g, or c
<400> 4198
ggagggaggg tgggaaagtt tggggggggg gttgtgaaaa cttaggncta attctgnnct 60
                                                                   65
ganct
```

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<210> 4199
<211> 355
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (277)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (294)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (317)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (339)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (354)
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<223> n equals a,t,g, or c

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<400> 4199
gaaganngtg tagaagaaat ctgccattta tattaaaaag aggaaaagga gcctctttct 60
taagacatct ctggatgaat gtttaagaaa ctgatggnta ttgcctntga tgaggggaat 120
tagatggctt gaggacgaag tggatggaag actttatatt atctttaccc ctttgtgtcc 180
ttttaatttt aaactacgtg atgtaacttg ctcaaaaagt agagataaaa tttaaaacaa 240
cccgaaaaat aaactctaga tcaattctat tgcttgncaa aggctttaat taancttgag 300
ggcaattctg ccttggntaa aggtattaaa gctatgcang caccaagctg aaant
<210> 4200
<211> 56
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<400> 4200
gctantaata aacggttgaa gtattgcaat aaaacttgag ttttaaaaaa aaaaaa
                                                                   56
<210> 4201
<211> 178
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (167)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (174)
<223> n equals a,t,g, or c
<400> 4201
gaaccntaca ttttccaaga ctcagggaac acagngatct acacagagtc ttgtgtttgc 60
acaanatgcc cagtggcacc atatggttta ttttggtagg caggatcttt gcanatgaaa 120
aaaaaatcta catgtacttg attttaattg anttacattg anaatangct cctntgga 178
<210> 4202
<211> 50
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<400> 4202
                                                                   50
ggtccnacgg gtccnggtac cagcacgtgc aggagtggtg ngagctgagn
<210> 4203
<211> 616
<212> DNA
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<213> Homo sapiens
<220>
<221> misc feature
<222> (479)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (482)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (565)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (581)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (598)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (605)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (614)
<223> n equals a,t,g, or c
<400> 4203
gcttgaagcc tgaaattgca gcactcattt ggtgaccagg agtgggcaaa cagaaggaca 60
aaggcctaca agattaaata atcaagtcat tattgtgaat ttggatctaa atgacctggc 120
agaaaccatg gagatgatct tggatttaaa gaggaaaaac tcaaagcaat gtattctgat 180
caagaaatgg caggaaatgg cagctacctg atatggaaca atcaacaact gaaggtttat 240
tttgaatgag aggtgttgtc caactgcgag acggagtgat tgaagctgag aataaatgga 300
aacacaatca atagtcactc cagtgaggta ggaaagaaag ccattccgaa gtggcagaga 360
agetgetttt teeteetgea tgetgeetge tagtgtggat ettggeataa cagacactae 420
ttggcaaaag atccatcctt ccttttccta tactttgctc ageggcctgg aagattganc 480
tnaaaagcaa aatcacctgg atttccttgc catttggctt tcaaatgtgc tcagccaatg 540
acaggctgga aagaaattga cagcntggga aaaagaggaa naatttgtgt ccaagaancc 600
ttccncttcc catntt
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<210> 4204

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<211> 94
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<400> 4204
gaaacnttgc agacatggag gtcctgtnct ggacacaccg tgaaggagca gtatggaaac 60
                                                                    94
tcttcggaag ctncaanatg atggangtgg ctga
<210> 4205
<211> 370
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (310)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (313)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (315)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (320)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c
<400> 4205
gtctcgaatt gctttatcta agtggcttcc atcagcagag gataggttct ttagtcctat 60
atgtttatat gtggagaaat ggtacaggat aggaactgtg tttgaagacc tgatgtatat 120
ttacaaatag gtagatctca ttagcttata atatttggct ttgaagttga aggctagttt 180
tattcattgc actgtatttt gctatcagat gtgaatttat ttagaaataa agaattctgc 240
tgtgaataat tgaggaaata cttaattcct tgacttatgt aaagaacacc ttgttcaatt 300
ggattggggn aantngttan ggtgctaagg ctctgagtga aactctnagt actgtatctg 360
                                                                   370
tgtcaatggt
<210> 4206
<211> 351
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (105)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (108)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (154)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (208)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
 <222> (213)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (217)
 <223> n equals a,t,g, or c
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 <221> misc feature
 <222> (220)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (231)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
. <222> (233)
 <223> n equals a,t,g, or c
 <220>
 <221> misc feature
 <222> (237)
 <223> n equals a,t,g, or c
 <220>
  <221> misc feature
  <222> (250)
  <223> n equals a,t,g, or c
 <220>
  <221> misc feature
  <222> (284)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (305)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
  <222> (322)
  <223> n equals a,t,g, or c
  <220>
  <221> misc feature
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<222> (338)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (351)
<223> n equals a,t,g, or c
<400> 4206
tccactatag ggnnagctgg tacgccngca ggtaccggtc cggaattccc gggtcgaccc 60
acgenteegg accaattneg ggacagteaa ggatteteaa tntgnatnnt ceaggeaaga 120
gaactttgta cnccttctct gtgtggatag actncncagc gttnttccta tggaaatgcc 180
cacagggctt gacgcgtgga gactgatntg ntncatncgn tagcgcgagg nancagngtc 240
gcctcgcccn tcccactgcg ggctcacggg gagctggcgt ctgncagtgc cttggcacgc 300
ctggnataaa ggttggctgg angcctgtca ctggcttntg gagctgaagg n
<210> 4207
<211> 391
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (154)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (159)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (168)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (197)
<223> n equals a,t,g, or c
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<220>

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<222> (223)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (342)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (350)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (389)
<223> n equals a,t,g, or c
<400> 4207
ggtggattct ttttctctcg tggtctcact ttgttacttg tttctgtccc cgggagcctc 60
agggetetga gagetgtget ceaggeeagg ggttacacet geeeteegng gteeeteect 120
gggctccagg ggcctctggt gcggttccgg gaanaagcna cacccnanag gtgacagctg 180
agcccctgcc acacccnagc ctctgacttg ctgtgttgtc canaggtgag gctgggccct 240
ccctggtctc cagcttaaac aggactgaac tccctctgtc cccagggcct cccttctggg 300
ccccctacag tctaccctac ccctcctcca tgggccctgn angangggan acccaccttg 360
aagtggggga tcaagtatag gcttgcacnt g
                                                                   391
<210> 4208
<211> 140
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (84)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (97)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<400> 4208
gaattctaat ggaaacgccc gactataggg tttgntggaa cgccccgcag gtaccggtcc 60
ggaattcccg ggtcgaccca cgcnttcgta cagtttntgg gaccacattg aggtggntga 120
                                                                    140
ngatgaagac gagacgcacn
<210> 4209
<211> 360
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (89)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (144)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (212)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (315)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (350)
<223> n equals a,t,g, or c
```

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<220>
<221> misc feature
<222> (357)
<223> n equals a,t,g, or c
<400> 4209
ggatgnacct tntnngtggc ggttgtggtg gtcctctgag agagcagaaa ccctgcatgt 60
cagatagggt ctgccaaccc taccctgana tggagctgct tccagccaca tcccatcgtg 120
gcatcattgt ggctggtctc ttgngctgta tcactgagct gtggcgctgc gtatgtggag 180
gagaagactc aatanaaaga ggagtacact angctgaagc agtacantgc cagggcntga 240
tggccctcac agcttgaaag tggaacagct gcttgtgtgg actgaaagca agttgtcctg 300
ccttccttgt acttnaaacc ctgctttgtt ctgaaagnac ctgatgngcn ggttcgngag 360
<210> 4210
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catgtataaa aanagttaca ttttanttan gcgncaaaat attatggtgg agcctaattt 60
gatatgctct ttaagtaata ttgagtnttt caaaagatac tncataatga tgaattaaaa 120
                                                                    157
taactttata tntctctaan gaaataacan atagtat
<210> 4211
<211> 215
<212> DNA
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<222> (106)
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<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (181)
<223> n equals a,t,g, or c
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<222> (209)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (212)
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ttaatacatt accnaaaaaa aagaatgggg gaaaaagnaa aggnggcgtt aaggccccct 60
acgaccgcca tgcacgctag ctctatagng caccnatcat cactgncgcg ttacaacgcg 120
tgctggaaac cctgcgtacc cactaatcgc ttgacacatc ccttnncagt gggaaacgaa 180
                                                                   215
naggccgccg tcgccttcca cagtggcanc tnatg
<210> 4212
<211> 103
<212> DNA
<213> Homo sapiens
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<222> (69)
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ggttgtaagg aacctgcang catggacgna ctcgaataga tgctcatact cttcctggtg 60
tgcctgtanc ctncctattc tcanacccac tttcctgttg ctt
                                                                    103
<210> 4213
<211> 211
<212> DNA
<213> Homo sapiens
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<222> (181)
<223> n equals a,t,g, or c
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<222> (189)
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aggnatacen ttetttggtt gagetaatea tgatatgtee gaganetgga tttttagaae 60
tgcnatcttc tcctaatgna cctgacccca aagtcaggct gtccgcgnct cggcctgacc 120
gtcacacagg gcggcaacag agcactaaga cgtgngacat atgaaatnga anagaacgtg 180
                                                                    211
naacagatna ttattctctt gaatgtgata g
<210> 4214
<211> 162
<212> DNA
<213> Homo sapiens
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<222> (20)
<223> n equals a,t,g, or c
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<222> (31)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (33)
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<221> misc feature
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<220>
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<222> (131)
<223> n equals a,t,g, or c
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gtccttcttc tctatagcan cctcaccgtc ncncgagcag gtggagcang cgaacgcttc 60
tcatgctcgn atgcatgagg ctgtgacaac cactcacgca naaagcctct cctgtcccgg 120
                                                                    162
taaatgagtn nacngccgga agcccccgtc cccggctctc gc
<210> 4215
<211> 129
<212> DNA
<213> Homo sapiens
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<222> (9)
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<222> (51)
<223> n equals a,t,g, or c
<220>
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (99)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<400> 4215
agtgaagtnt gcgaagataa gctcttaatt cgtggttgat ctgtatctct ngctttntaa 60
tgtaacaaaa atatcttaca gatacatgaa attangaana tctaaaagta ccattactct 120
                                                                   129
<210> 4216
<211> 302
<212> DNA
<213> Homo sapiens
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<222> (191)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (194)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (214)
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<221> misc feature
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<222> (256)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (291)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c
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ttgctgcttg ngtgtnatct tgtncatgcc tgctcatgaa ctgtaagttc aatcaaccag 60
cagncatgca cactcgggat cactccaaat gatagnaaag cnaaanattt aaaggggtgt 120
ctcttgatan acagaacatc accatntaag ncgctgtttn acgactgtna cactgacaag 180
ttgtggtcaa nccngaggaa tgtcaagcag acantggtga acatttgana ggtcatagtg 240
agctttgtca atgganctac ctgcgatctg tggattgggc gaataaaaaa ngacacgntt 300
tg
                                                                   302
<210> 4217
<211> 127
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (3)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (21)
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<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
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<222> (108)
<223> n equals a,t,g, or c
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<222> (109)
<223> n equals a,t,g, or c
<220>
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<222> (124)
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canceggagg aaaggeaegt nagganetgg tttggeggga ttegtgaage egegeaggtg 60
gtgggtgnac ggtgcaggag nagattgttt ggtactgagc gtgcgcgnna caggttgggg 120
gganatt
<210> 4218
<211> 359
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
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<222> (37)
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<221> misc feature
<222> (193)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (194)
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<222> (256)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (257)
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<222> (259)
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<222> (295)
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<221> misc feature
<222> (315)
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<222> (346)
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gtggtncaga gagtccggga ggccgtctga cnacccagcc ngaaacagcn ctcggatccc 120
agetgataag gagetgggge teggtgteta tntgtgaace aetgeaegeg gacacattae 180
aggeteggge tgnnegteet eteetgetge agetgeatet eegetaatgg ggeeagetge 240
taacattgag gntggnncnc atcenttegg egeteegtga gacaaggeag eetgneeacc 300
agetgngeae ttegnetgat gacacagatg geteatgaat geetgngace gggtgegge 359
<210> 4219
<211> 139
<212> DNA
<213> Homo sapiens
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<222> (22)
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<221> misc feature
<222> (24)
<223> n equals a,t,g, or c
<220>
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 <222> (86)
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  <220>
  <221> misc feature
 <222> (96)
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  <220>
  <221> misc feature
  <222> (111)
  <223> n equals a,t,g, or c
  <220>
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  <222> (114)
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  aaatetgetg gtttgteett tntnetetnt tteetaeeee tettaataaa gtgeatgaaa 60
  agtacaggcc aacctnccac tgcctnctct gctccnagaa aactcgagga ntgncttctt 120
                                                                     139
  ttggtttact aactgttca
  <210> 4220
  <211> 257
<212> DNA
  <213> Homo sapiens
  <220>
  <221> misc feature
  <222> (23)
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  <220>
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  <222> (33)
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  <220>
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<222> (48)
<223> n equals a,t,g, or c
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<222> (104)
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<222> (133)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (155)
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<221> misc feature
<222> (209)
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (234)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (252)
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attgcttaga agaagtggcc cgctcaggga acccagccct acancgccaa atccgaaagg 120
gcaactetet ggneceteca ggaggaeeee agggntgaag gaagetgeet tgaeeacate 180
tccgcaggaa atggctcagt ccgtcaagnt gtgaaaaaag ctgnccgcgc tgnngagtcc 240
ttccaatgct gncatgg
                                                                   257
<210> 4221
<211> 288
<212> DNA
<213> Homo sapiens
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<222> (9)
<223> n equals a,t,g, or c
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<222> (53)
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<222> (66)
<223> n equals a,t,g, or c
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<222> (73)
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<222> (148)
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<223> n equals a,t,g, or c
<220>
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 <222> (280)
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<221> misc feature
 <222> (288)
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 ccgcancctg ccntgcagag aatngcagga tcccgatctg catgattcag aaaggcatga 120
 caagagaaga ctcaccgtaa atcaaggntn aaagaaaaga agngaangtc tcgcactgtc 180
 aaaccagtgg tggtacaaga acggcggacc cgggtggtaa actcncaaat gctagaatta 240
                                                                    288
 tctctnaaga tgtcctcgaa gctgttngcc acggaaaaan cgatagtn
 <210> 4222
 <211> 149
 <212> DNA
 <213> Homo sapiens
 <220>
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 <222> (9)
 <223> n equals a,t,g, or c
 <220>
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<220>
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<223> n equals a,t,g, or c
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<222> (84)
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<222> (111)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (138)
<223> n equals a,t,g, or c
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ttgactttnc aaagaaacac ggctccgtcc gaccagaata aaggcnncca caaaaactca 60
ctcagggagg tggncgcggg gccncggctg gaaaacaatg catgaggggg ngcatctctt 120
                                                                   149
cagcttagca gngtgacnca agaggctaa
<210> 4223
<211> 112
<212> DNA
<213> Homo sapiens
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<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<223> n equals a,t,g, or c
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<222> (48)
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<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<400> 4223
catacagaca actctataag actaccngag gacccnctac anattcanca tgacaagcga 60
taaggatcac tataactgtc ccacaangag tacagtctat aacatagctg ga
<210> 4224
<211> 200
<212> DNA
<213> Homo sapiens
<220>
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<222> (11)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
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<222> (38)
<223> n equals a,t,g, or c
<220>
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<222> (64)
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<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
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<222> (178)
<223> n equals a,t,g, or c
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<222> (189)
<223> n equals a,t,g, or c
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gtgncgcggg ataaccctgt gtggaattgt gactggtatt tcagaagaag agaatggcaa 120
gatgagaagc tgnataagga gatgggtaga tcataggnac caatgcataa catanatnga 180
                                                                    200
agatataang aagggaaaaa
<210> 4225
<211> 102
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<221> misc feature
<222> (60)
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<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
<223> n equals a,t,g, or c
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aactcgctac cttcggagct tttaaccttt tgnctcggct caaccatccc gagattnggn 60
gataatggaa ccgacacaca cacaagnccc catcgcancc ac
<210> 4226
<211> 135
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
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<222> (86)
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<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<400> 4226
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tgtgagaatg gggaaggggg ggncttaaaa ttctgtgggg gggntnttct ccaaacatag 60
ttccaccatc gcatccccgg acccnnctgc atatcgatgc tngacatcgg ggagggagta 120
agctaccact gtctt
<210> 4227
<211> 180
<212> DNA
<213> Homo sapiens
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<222> (11)
<223> n equals a,t,g, or c
<220>
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<222> (21)
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<220>
<221> misc feature
<222> (58)
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<220>
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<222> (74)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (103)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (147)
<223> n equals a,t,g, or c
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<222> (158)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<223> n equals a,t,g, or c
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ggtttggtat gtgnaaccca aggtatncga ttattgaaca gcnatatgat aggaatcttt 120
tcatacagca gtcttgggat gtataanctg aactgggnca tggcgagata nttgccaaag 180
<210> 4228
<211> 212
<212> DNA
<213> Homo sapiens
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<222> (1)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (123)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
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<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (207)
<223> n equals a,t,g, or c
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nngageteaa ntgegtgaeg geteacaett gtnaceagae taeatetgnt ttgataeatt 60
cacacacaag gtggacaaga gagtcaccaa atttgtacaa aactcacaca tnccacgtgc 120
agnicactgae tetgegggga egeagettet etteceaaaa eeaaggaeae eteatgaate 180
                                                                   212
tcctnaccct nacgtacatn ctcgtgntgg ac
<210> 4229
<211> 145
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
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<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (98)
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<222> (131)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<400> 4229
tctntcaaaa tnttgggagc tttaagaacn ttgacattga aacgagctgg gaatggaaag 60
gctagcaagt atgctgggca tgcccnctga agcccccngt gacgaggata ccataaatct 120
                                                                   145
cttgtggaan nnagaccaga cgaca
<210> 4230
<211> 309
<212> DNA
<213> Homo sapiens
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<222> (2)
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<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (17)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (55)
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<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
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<222> (208)
<223> n equals a,t,g, or c
<220>
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<222> (231)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (274)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (302)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (303)
<223> n equals a,t,g, or c
<220>
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<222> (307)
<223> n equals a,t,g, or c
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catgaaggag atggaacnca gatgtgcgca ttgcaccagg ctcaacaaag ctgctggcca 120
aaggaataag gatgtccata ccgaatccgt gtgccggctg ccagaaacgt aatgaggatg 180
aagatcacca gataagctaa tacttggnac ctatgacctg taccactttc naaatctaca 240
gacagcaatg tgatgaaaca aatcgctgtc gtanatcaaa taaagtataa atcgcttcaa 300
                                                                   309
anngaanat
<210> 4231
<211> 115
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (36)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (81)
<223> n equals a,t,g, or c
<400> 4231
cactgcatct ggacttcctg aatgaggcgc tcggtnccca gctggatncn ggaacctgcc 60
cttcctaggn acaccctagg ntaccctctg ctccttccct gctgtgtggg gagat
<210> 4232
<211> 253
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (145)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (204)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (208)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c
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aagcccagnt ntccaaggtg tnagacagtn acgcaaatgt tgtgtcnagt gccaccgtcc 60
cagcaccacc tgtggcagga cgcagettct ccccccaaa cccaaggcac cctatgatct 120
ccggaccctg aggcacgtgc gtggnggtga cgtgaccacg aagacccgan gtccagttca 180
acctggaccg tggacngcat ggangtgnca taatgcnaga caagccacgg aggagcagtc 240
                                                                   253
aacagcacgt ccg
<210> 4233
<211> 102
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (59)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (67)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
<400> 4233
gaagtncatc gcttaacctg cgtggaattt tgcgaccttg tatgcaggga aacagggcnc 60
                                                                    102
ctgaagngna ctcttctnag atatcaacta ttgatgatat cc
<210> 4234
<211> 231
<212> DNA
<213> Homo sapiens
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<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (76)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
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<222> (157)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (194)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (224)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (229)
<223> n equals a,t,g, or c
<400> 4234
caagactgct tgtagacgcn caattccnna taccaaagct gaaaatggct gcataaatat 60
ttccccgtaa ttntcnaagg aaaatgatac aagactaatt acatactgat taaaaagcaa 120
nctagaaact tcttacatat ctctatttaa catttgnaaa gaaacaaatt gtcaggggct 180
ctgcagacaa catnatatct cttaatcatg caaattaaat gatnnatana a
<210> 4235
<211> 202
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (145)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (156)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (164)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
<400> 4235
cctaattgan acaacttntt cagagaaacc ccttccccgg attngattga aaaggacctg 60
gacagnatng ctgttcacag actggttatc ttctcaggaa agaacaaaaa gtacaacagg 120
ctcttctaga aagtctggan tctgnctgga gatagncagg gagnaccagt gtagtgaagg 180
agaanctaca tcttaagaag tg
                                                                   202
<210> 4236
<211> 103
<212> DNA
<213> Homo sapiens
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<222> (30)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (64)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (73)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (75)
<223> n equals a,t,g, or c
<400> 4236
ttatacatgc attgtgagaa aatgtgatgn ggcaagagtg agtaataatg anccctacaa 60
                                                                    103
accncagcag aantngcatc ttatctttag aaaaaaaaga taa
<210> 4237
<211> 390
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (103)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (181)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (194)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (199)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (241)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (277)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (303)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (356)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (357)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (385)
<223> n equals a,t,g, or c
<400> 4237
agaagctatt ctctnacgat tnatgtgtta gccctgtgna gttaactttg tgtcggtgcc 60
taccgcatat aagataagct gaaacgctgc tggagtgtgt gcngtgccac ctttggcgct 120
tegggetnan eaggtgeaag tggaetgeae ettetgeage tetaetgtgg egtttgtgge 180
ncgaagaact cgtnacttnt gtgacgaagt ggtggctctg tgcctgnctg ccagncctgt 240
nccatggacc cagtgtggtg aggcatctgc agcgcgntag gccagcgctg catgaccgtc 300
tgncctgacc catggaccca gatctgtctc ggtggccttc cctcatgcag gtgcannccg 360
                                                                   390
gctaataaca tgtgtggctc caanntaaaa
<210> 4238
<211> 122
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (72)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
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<400> 4238
tacggggaaa cncgactcac ttttgggaaa gctgccacgc ctgcaggtac cggtccggaa 60
122
<210> 4239
<211> 349
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (270)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (316)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (319)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (321)
<223> n equals a,t,g, or c
<400> 4239
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gagggattgt gacgacgagn ttgggagagg acaacagaga aatgganaga tgtggatgga 60
gttcctttag tctctgctct tgtgctcctc tgggggaatg tcttatacng ttttaaagga 120
ctctgtggtc aagaaagttt gggaaacact gttccaaatg tctgcaagcc ccatgaccct 180
attcaactcc atgacagctt ctattgatag gctctatcct cactgtaaaa attttcaatg 240
tatgctctga tggtcactgg taaagaatgn tacggaacca gcttggtntt ctggaaactg 300
                                                                   349
gtaaataaca ggaacnatna ngcattaatt ctgctattgg tcactaata
<210> 4240
<211> 300
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (19)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (53)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (107)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (250)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (276)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (290)
<223> n equals a,t,g, or c
<400> 4240
ggcatggcgg agccgctgnt gcgccgcgga gaggccgggc gagtcgggcg ggntcggcgc 60
ccgcgctgag ccgcggagga ggggcngagg acgcccctgc agccggngcg tctgcctca 120
gtgaggcggg gcgcgcggcg gacgcccccg ggcaggggcg ggagnggtgg aggcgccggc 180
ggatggcact gacaggggg gtgagcgagc cgctccggtc tccgggcgag gcttggcctt 240
cctagcagan acgccgtcta ccgcaggacg ttccancgag ggaaaannan tcggatcgta 300
<210> 4241
<211> 131
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (13)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (99)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (127)
<223> n equals a,t,g, or c
<400> 4241
ggtacgtgat anntttggga angccccgg tccggttttg ccgggtcgcc ccacgcgtgc 60
gaaagngatn atacatgtat ttgaacactt gatggttcna acagtcttaa atgtaatgct 120
tggggnnaag c
<210> 4242
<211> 146
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (88)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c
<400> 4242
cncngggaac gcccctata gggtnaggtg gaacgcccgc aggtaccggt ccggaatttc 60
cgggtcgacc cacgcgtccg gcgtgatnca nggtctgggg accacagtgc tgatggaggg 120
                                                                   146
ngaggctacc tnaagaaagn gagatg
<210> 4243
<211> 300
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (109)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (273)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (287)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (296)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c
<400> 4243
ncctantata gggtnaggtg gaacgcccgc aggtaccggt ccggaattnc cgggtcgacc 60
cacgcgtccg gggctcntcg ggaccagatc cgcgagcccg tcagcctgng ccatgggctg 120
cgacggccgc gtgtcggggc tgctccgccg caacctgcag cccacgctca cctactggag 180
cgtcttcttc agcttcggcc tgtgcatcgc cttcctgggg cccacgctgc tggacctgcg 240
ctgtcagacg cacagctcgc tgccccagat ctnctgggtc ttcttcncgc agnagntntg 300
<210> 4244
<211> 318
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (15)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
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<223> n equals a,t,g, or c
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<222> (76)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (214)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (301)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (304)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c
<400> 4244
aggccccggt ccggntttcc cgggtcgncc cacgcgtccg ctctgtttna gagaggccag 60
gctggtttct gccntnatcc tttaacacag catcttctcc cagaggcctg aggatgggaa 120
aaagtgatgg agaaaagggg aacccctaag gtcacccctc agccaggggg aactgtttaa 180
caggggtttg tctctgccct tttgagcctt tggntttcta cctggctcag gcacccaggt 240
ttatgttttc tagatcaaaa ctctgcatgg nctccctgag aagactggga gaagaanttg 300
                                                                   318
nccntcagga ntgggatt
<210> 4245
<211> 206
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<212> DNA
<213> Homo sapiens
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<221> misc feature
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<222> (67)
<223> n equals a,t,g, or c
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<222> (73)
<223> n equals a,t,g, or c
<220>
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (86)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
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<222> (94)
<223> n equals a,t,g, or c
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<222> (101)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (114)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (159)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (179)
<223> n equals a,t,g, or c
<400> 4245
ggctcgcctt tcacaaagag cttcaacagg ggagantgtt agagggagaa gtgccccac 60
ctgctgntca gcnncagcct gacccnntcc catnetetgg netetgaccc tttnttcaca 120
ngggacctac ccctattgcg gtcctccagc tcatntttna cctgacccct cttcttctnc 180
                                                                   206
ttggctttaa ttatgctaat gttgga
<210> 4246
<211> 137
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (52)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (55)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (76)
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<221> misc feature
<222> (113)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (126)
<223> n equals a,t,g, or c
<400> 4246
cctnttngaa agccccggtc cggatttggc gggtcgaccc acgctgtccg gnganctttt 60
tattaggaaa tgcatntaac catgttttag atgagtgcta aaggaagctt ttnagggggc 120
                                                                   137
ccctgncaat aagggag
<210> 4247
<211> 108
<212> DNA
<213> Homo sapiens
<220>
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<222> (26)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (35)
<223> n equals a,t,g, or c
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<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
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<222> (89)
<223> n equals a,t,g, or c
<400> 4247
agggtggaac gcccgcaggt accggnccgg aattnccggg tcgacccacg cgtncgggca 60
taatcngggc tcacctggac ttaagcagnc tggctggaat ccacagtg
                                                                   108
```

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<210> 4248
<211> 164
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (11)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (22)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (99)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (137)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c
<400> 4248
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accacngaca nctcggaaac gncccactat agggttaggn ggaacgcccg caggtaccgg 60
tccggaattc ccgggtcgac ccacgcgtcc ggtactctnt taaaattcct gtgtaaactg 120
ggactttgcn gttcacnttc ttgtgtttca agaacagtan cncg
<210> 4249
<211> 196
<212> DNA
<213> Homo sapiens
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<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (144)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<400> 4249
ggacnetgne entgagteeg neegaateeg etenecaege gtegaaetgg cetaeggett 60
gtctatctgc tgatgagcta agaatttgca agacagtaca gctgcagcag ncatcactaa 120
gcagaacttc tnnagccaca catnaccaca gaatctcact ggncattgtg ctatgctctg 180
ccaatggcat gctgaa
                                                                   196
<210> 4250
<211> 259
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (49)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (51)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (121)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (138)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (152)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (196)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (209)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (247)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (249)
<223> n equals a,t,g, or c
<400> 4250
cccntttctc gcccatgatg aatgagggtg ngnatgtctc gtagtacang nacgatgacc 60
tctttccacc gtgtgctggg aaaaggcatc ggagacctgg catcgcaaag ctctctttga 120
ngaaagatga tetegatnea teeegagetg angeeteate aagaagggga agattegtga 180
aaccctgaag tgaccntgtn ctggtggcna gttcctaatt atgaaaggat atgcactgaa 240
                                                                   259
agccgtncng ataacttga
<210> 4251
<211> 187
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (6)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (40)
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<220>
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<222> (45)
<223> n equals a,t,g, or c
<220>
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<222> (50)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (133)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (134)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (148)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<400> 4251
ccaccncgtc tttgactgcg tactctgtan gttgctcacn gcatntgcan acatcctatt 60
atgtcatata atatgcagat gacataagac tattttctaa acatcctcca tcttccacag 120
agtgtgatgt cannectcag tgnetatntg gaettagatg ggntcactct tetetggaat 180
gatgaga
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<210> 4252

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<211> 134
<212> DNA
<213> Homo sapiens
<220>
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<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (12)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (65)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (112)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (130)
<223> n equals a,t,g, or c
<400> 4252
cnctgctgac cngtccanag tcctgtagaa tgtcgttctg tctgtctctg actgcctgtc 60
tactntggtn cgcttgggac aactagaaac ttaaacagca aatggccaag tnaacanaca 120
                                                                    134
ttgtgcatan gctg
<210> 4253
<211> 115
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<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
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<221> misc feature
<222> (41)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (84)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (102)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (105)
<223> n equals a,t,g, or c
<400> 4253
gngactncgc cgaagcaggc ttctcgcaac tccgggagag nacaaggatg cagtgtccag 60
gcaacatgtg tcgccaggna gganctgtac cttctgttcg anacnaatgc ggctg
<210> 4254
<211> 104
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (39)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (48)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (77)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (84)
<223> n equals a,t,g, or c
<400> 4254
acattggtgg ctctatgtgg atatnatgcc tcatttcanc tgcatctnta catttactga 60
                                                                    104
gagctgtcat tgagccntca tcantcgcta ctggagaaca tatg
<210> 4255
<211> 242
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (123)
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<220>
<221> misc feature
<222> (165)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (211)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (218)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (237)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (241)
<223> n equals a,t,g, or c
<400> 4255
tggaccgngn aacgcccctn gggcgtcgtc cctaactcgt cattgtnttg tcgtcaagac 60
ttgaacacta acgagatatt gcagcccttg acggagaata gagcacatag aagctcggtg 120
acnaaaggtg agacactcac ctagaacagt gccgtgctgt gctgngaagg tgcttacaca 180
cacaggccac atgggaaagg cccagcagcc ntaagctnct acttctccat aaagagnaca 240
                                                                   242
<210> 4256
<211> 235
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (4)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (37)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (118)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (142)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (162)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (190)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (216)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (222)
<223> n equals a,t,g, or c
<400> 4256
cttnegtega cegatetgtg agetnagegg ageetgnget geecacacte cateegegeg 60
tacacttctc tgctctangg ctcagancac atacgacgga tagcaccaca acctgctncg 120
gacgtcgatt gagctaagca tnggtgctgt cgtatccgtc tntgccgaag actgtgacgt 180
gaaatgaatn tggcagtctc tcaactcgat tcccanagcc gngactgatt gactg
                                                                   235
```

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<210> 4257
<211> 266
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (8)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (33)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (61)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (66)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (141)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (193)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (215)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (217)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (237)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (255)
<223> n equals a,t,g, or c
<400> 4257
cgaatconct caccacgogt cgagctoctg tantotgggc tgtatgcctg ggtotctgga 60
ncagtngaaa tgggagacta gnctcagctc ctatacgcac cctggagagc ggctcatctc 120
tgatgtctag cagacctcct natagaatgg aacaactatt ggatggtacc tgagaaccag 180
gcagtctcac agntcctgat cattggtcta atccngnctc cgggtcctgc aggtcantgc 240
                                                                   266
agtgggtatg cacanactta cactga
<210> 4258
<211> 101
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (27)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (44)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (79)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c
<400> 4258
ggggaaggna ccggggacca gttgggnaaa agggccccca tttnggggaa aaacgggccc 60
ccgtaagaag ggaaggatnn ggagagcggc gacgaaaccg g
<210> 4259
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<211> 105
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (14)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (83)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<400> 4259
attgcttaat tgcntggtta cctttnatat caactattat ctttctggga aagttttcgt 60
                                                                    105
ttttctgtaa accaacctcc atngacncga naaatcattt cttaa
<210> 4260
<211> 101
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (18)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (69)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (91)
<223> n equals a,t,g, or c
<400> 4260
ccattgatct gccgcagnan tttctagaca atcggccaca atagaagctg cgtaatanat 60
                                                                   101
agatgaaanc attcctctgt actctttaat nccatccttg a
<210> 4261
<211> 314
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (29)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (58)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (117)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (124)
<223> n equals a,t,g, or c
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<220>

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<221> misc feature
<222> (138)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (163)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (201)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (310)
<223> n equals a,t,g, or c
<400> 4261
ggcaccettt ccctacettt cccttettna ateteetggt ttaccattaa tgacttenee 60
tctgccatct actgacttaa ttttcaattc tgcnactcca tcttcaaacc ccctnanctt 120
tccnatccta ctcctgcnat gcattgaagg gtcaatgcat ttnggggtga gctctgggtt 180
taggggeece ntecatecet nagetaceet ggatetttge ceaectntte etcagageee 240
ccactgaggg gccgtagcct atctaggggt ntggnaggag cagattggtt cctaactgtt 300
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3896

314

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ttccctngtn tttg
<210> 4262
<211> 372
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (70)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (90)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (92)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (94)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (158)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (166)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (202)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
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<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (357)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (371)
<223> n equals a,t,g, or c
<400> 4262
gcaggaccag tttggaaaag ggtcaggtaa gggtttccac tctgcacatt gtanagggaa 60
cactetgtan geceatgggt ceettactan anangttgag tgaatttgee tteagttaac 120
atgggacctt ctgtttagct tcctcttgct tcccaaanat tttaancatt ttgtaaatgt 180
ataaactcac ctctggtaac antggcccan acctgctttg tgctaaaaac atgggaaatt 240
aaggeetett ttaaaaaaaa aateecenca aaaggtttet ggeaceeatt ttettaneen 360
                                                                372
ggccaatttt nt
<210> 4263
<211> 559
<212> DNA
<213> Homo sapiens
<400> 4263
ggacagaggc tgttccctat ggcagaaggc aaccacagaa aaaagccact taaggtgttg 60
gaatccctgg gcaaagattt cctcactggt gttttggata acttggtgga acaaaatgta 120
ctgaactgga aggaagagga aaaaaagaaa tattacgatg ctaaaactga agacaaagtt 180
cgggtcatgg cagactctat gcaagagaag caacgtatgg caggacaaat gcttcttcaa 240
acctttttta acatagacca aatatccccc aataaaaaag gtgataaatt gggtcacaga 300
ggcagaaatc acaatttatg ttctgcaata tcctgcagct catccgaata tggaggctgg 360
accacctgag tcaggagaat ctacagatgc cctcaagctt tgtcctcatg aagaattcct 420
gagactatgt aaagaaagag ctgaagagat ctatccaata aaggagagaa acaaccgcac 480
acggctggct ctcatcatat gcaatacaga gtttgaccat ctgcctccga ggaattgagc 540
                                                                559
tgactttgac atcacaggg
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<210> 4264
<211> 541
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (26)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (28)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (30)
<223> n equals a,t,g, or c
<220>
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<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (34)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (78)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (97)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (132)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (492)
<223> n equals a,t,g, or c
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3899

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<400> 4264
ttaacccgca ctaagggcac aaagtntngn nctncaccag gtggaggccg ctcctagcaa 60
ctagtgggtc ccccgggnct gcagggaatg gtcacgnggg gtcatgcagg atgtggtgga 120
gggacttcaa gnaataagta cgaagatgaa attaaccgcc gcacagctgc tgagaatgag 180
tttgtggtgc tgaagaagga tgtggatgct gcctacatga gcaagtggag ctggaggcca 240
aggtggatgc cctgaatgat gagatcaact tcctcaggac cctcaatgag acggagttga 300
cagagetgea gteccagate teegacacat etgtggtget gtecatggae aacagteget 360
ccctggacct ggacggcatc atcgctgagg tcaaggcaca gtatgaggag atggccaaat 420
gcagccgggc tgaggctgaa gcctggtacc agaccaagtt tgagaccctc caggcccagg 480
ctgggaagca tngggacgac ctccggaata cccggaatga gatttcagag atgaaccggg 540
                                                                   541
С
<210> 4265
<211> 455
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (5)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (31)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (60)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (141)
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<223> n equals a,t,g, or c

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<220>
<221> misc feature
<222> (155)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (158)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (170)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (185)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (186)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (195)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (213)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (214)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (225)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (230)
<223> n equals a,t,g, or c
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<220>
<221> misc feature
<222> (249)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (293)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (303)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (319)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (384)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (406)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (418)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (426)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (440)
<223> n equals a,t,g, or c
<400> 4265
naggnggggn attecttgat taccactete naaattaace etcactaaag ggaacaaaan 60
ctggagctcc accgcggtgg cggccgctct agaactagtg gatcccccgg gctgcaagga 120
aatteggnac aatteccagg neacageaaa ggtengtnaa acceeecen ceatecceag 180
ttatnngggt ccccnggaat cctcctgttc ctnnaatcag gctcngtttn ccccctagcc 240
actacgggna gnctctgaga gtgccgcttt acttgcattc tgcaacaatt acntgtntcc 300
ttnagatect ngggeeaant teeteete teetagetee tggeeetgg ggeeagggee 360
cctcttgctg tttttacctc tgtnccttgg ggcctactac ccaagnaagc acccgaangg 420
                                                                   455
ggggangttt tggggattan aagaggaaac cttct
<210> 4266
<211> 271
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (7)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c
<400> 4266
ccgccanccn cactaaaggg aacaaaagct ggagctccac cgcggtngcg gccgctctag 60
aactagtgga tcccccgggc tgcaggaatt cggcacgagt gccattttaa tcaaagttgt 120
aatttttaaa aagtcaccta aaactctggt tttaaaagat cctctgtatt gaaaacttct 180
gataatgtat gtcattatgt ccttactatt ccttaattgt agttttaaaa tattggtata 240
gtacttgaca gagtaaatac ttcatctgat t
                                                                   271
<210> 4267
<211> 355
<212> DNA
<213> Homo sapiens
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<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (87)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (224)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (354)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (355)
<223> n equals a,t,g, or c
<400> 4267
gtcccaaagt gctgcgattn taggtaatga aagtatggga tgctcatgtg acagcagttt 60
gctcccaaga tgccagtgaa cttgtcngga agcttggtgc agacgatgta attgattaca 120
aatctggaag tgtggaagag cagttgaaat ccttaaaacc atttgatttt atccttgata 180
atgttggcgg atccactgaa acatgggctc cagattttct caanaaatgg tcaggagcca 240
cctatgtgac tttggtgact cctttcctcc tgaacatgga ccgatagggc atagcagatg 300
gcatgttgca nacaggagtc actgtagttc aaangcatta aagcatntct ggann
<210> 4268
<211> 338
<212> DNA
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<213> Homo sapiens
<220>
<221> misc feature
<222> (76)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (82)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (290)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (330)
<223> n equals a,t,g, or c
<400> 4268
gccgtcatct actctaccat ctttgcaggc acactcatca cagcgctaag ctcgcactga 60
ttttttacct gagtangcct anaaataaac atgctagctt ttattccagt tctaaccaaa 120
aaaataaacc ctcgttccac agaagctgcc atcaagtatt tcctcacgca agcaaccgca 180
tecataatee ttetaatage tateetette aacaatatae teteeggaca atgaaceata 240
accaatacta ccaaatcaat actcatcatt nataatcata atggctattn caataaaact 300
                                                                   338
aaggaatagc ccctttcatt ctgaatcccn aaagttac
<210> 4269
<211> 479
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (187)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (210)
<223> n equals a,t,g, or c
<220>
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<221> misc feature
<222> (226)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (227)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (249)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (258)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (259)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (324)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (328)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (355)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (360)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (404)
<223> n equals a,t,g, or c
<220>
<221> misc feature
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<222> (410)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (426)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (461)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (479)
<223> n equals a,t,g, or c
<400> 4269
gaagctatcg ggcccatacc ccgaaaatgt tggttatacc cttcccgtac taattaatcc 60
cctggcccaa cccgtcatct actctaccat ctttgcaggc acactcatca cagcggctaa 120
gctcgcactg attttttacc tgagtaggcc tagtaaataa acatgctagc ttttattcca 180
gttctancca aaaaaataaa ccctcgttcn acagaagctg ccatcnngtt atttcctcac 240
gcaagcaanc gcatccanna teettetaat ggetateete tteaacaata taeteteegg 300
aacaatgaaa ccataaccaa tacnaccnat caatactcat cattggataa gcatnatggn 360
tattggcaat taaaactagg aatagccccc ctttcacttc tgantcccan aaggttaccc 420
caaggnaccc cctgaaatcg ggctgcttct tctcacatga naaaaataac cccgctcan 479
<210> 4270
<211> 376
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (359)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (366)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (372)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (374)
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<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (376)
<223> n equals a,t,g, or c
<400> 4270
cccacgcgtc cggacccacg cgtccgatca acaccctcct agccttacta ctaataatta 60
ttacattttg actaccacaa ctcaacggct acatagaaaa atccacccct tacgagtgcg 120
gcttcgaccc tatatccccc gcccgcgtcc ctttctccat aaaattcttc ttagtagcta 180
ttaccttctt attatttgat ctagaaattg ccctcctttt acccctacca tgagccctac 240
aaacaactaa cctgccacta atagttatgt catccctctt attaatcatc atcctagccc 300
taagtctggc ctatgagtga ctacaaaaag gattagactg aaccggataa aaaaagaana 360
                                                                   376
agagangaag ananan
<210> 4271
<211> 542
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (482)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (527)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (536)
<223> n equals a,t,g, or c
<400> 4271
gagtaaacat tgctcaccag atctctctac gttcagaagc attttttcat gcaatgacct 60
ctcaacacga gttgcaggac tacctcagga aaacttccca ggctgtaaaa atgcttcgag 120
ataaaattgc acagattgat aaagtaatgt gtgaaggatc actccacatt ttaagactgg 180
cacttaccag aaataattgt gttaaagtat acaataagct gaagttaatg gccactgtac 240
accagactca gcctacagta caggtgttat tatctacttc tgaatttgtt ggagcattgg 300
acttaatagc aacaacacaa gaggttctac agcaggaact tcagggcatt cacagtttcc 360
ggcatttggg atcacagctt tgtgaattag aaaaactgat agataaaatg atgattgcag 420
aattttctac ttattctcac agtgacttaa atagaccact ggaagatgac tgtcaagttt 480
anaaagagga aagactaata tctcttggat ttggctttaa aaccaanaaa gcttantttt 540
                                                                   542
aa
<210> 4272
<211> 611
<212> DNA
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<213> Homo sapiens
<220>
<221> misc feature
<222> (340)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (460)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (469)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (530)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (534)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (579)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (582)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (587)
<223> n equals a,t,g, or c
<400> 4272
ggaagagcac ccgctctccc tgggtgacca ggtgaccccc atcatcgacc taatggccat 60
cagcaacgct cactttgcca agctgcgcga cttcatcact ctgcgccttc cacctggctt 120
ccccgtcaaa attgagattc cccttttcca cgtgctcaat gcccgcatca ccttcagcaa 180
cctgtgtggc tgtgatgagc ccctgagctc cgtgtgggtg ccggcccca gctctgctgt 240
cgccgcatca gggaaccctt tcccgtgcga ggtggacccc accgtgtttg aagtgcccaa 300
cgggtacagc gtgctgggca tggagcgcaa cgagcccctn cgggacgagg acgatgacct 360
cctgcagttc gccatccagc agagcctgct tgaagcgggc actgaggcgg agcaggtggg 420
acttgcccag ggggtgggct ctggcctctg cagacacacn gcagaagtna cagctgtggg 480
```

3909

```
ctctggtggc tgcaggtgac cgtctgggaa ggccctgacc aacacccggn ccgntgcccg 540
gccttcttcc caggccacgg tttatgagga acagcttang cntggancgg ggcccttcag 600
                                                                   611
gaaaagccct g
<210> 4273
<211> 352
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (46)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (75)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (115)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (116)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (151)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (159)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (177)
<223> n equals a,t,g, or c
<220>
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<221> misc feature

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<222> (190)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (191)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (205)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (268)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (324)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (333)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (345)
<223> n equals a,t,g, or c
<400> 4273
tattggtggc atcacagctc ccacagtaag acagtactac gcttanctca ccgncacaca 60
gtgcaagccc gtagnaacac aatgctgggt gtttggggtc attggtttcc tgggnngtcc 120
attgtttgca taaaatttgg acaagatctc ntgtctaana cccaaatact ctatgtngtg 180
ctttggcttn nttgcgtggc tttgnaccac tttcctctgt tcttttacgg catgntttgg 240
tatgcagaac actatgggtg cactgggnaa aagacctgac ttcggaagtg tgaaagatgg 300
gcacctnttg gttcccagtg gatncttcct ggncatcctt aggtnaaggg ga
                                                                   352
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<210> 4274
<211> 407
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (297)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (334)
<223> n equals a,t,g, or c
<400> 4274
cagaaaatat gcctcataca acatgagaga tgtcatacag gaaagactcc ctttgtatgt 60
accgagtgcg gaaaatccta ttcacacaaa tatggcctca ttacccatca gagaattcac 120
acaggagaga aaccttatga gtgcaatgaa tgtggaaaag ccttcaccac aaagtcagta 180
ctcaatgtac atcaaagaac gcatacagga gagaggccgt atggatgcag tgattgtgag 240
aaagcettet eecaettate aaacettgte aaacataaga aaatgcacae aagaganatg 300
ggtagaatca gtcaagttga aaactcctgt aatngagagt cacagctcct tccttataag 360
tgaactcatg cagaagaaaa ccctactagt gccgtgacta tggaaaa
<210> 4275
<211> 538
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (2)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (9)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (54)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (128)
<223> n equals a,t,g, or c
<400> 4275
gntcgaaant aaccctcact aaagggaaca aaagctggag ctccaccgcg gtgncggccg 60
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ctctagaact agtggatccc ccgggctgca ggaattcggc acgaggtaag tggcgcgatt 120
cgggcagncc ccgatggaac ctcctggtcc tgtgagggta cacagggaca agagaagatg 180
atgatgatgg gaccaaagga agaggaacag tcttgtgagt atgagaccag gctacctggg 240
aaccactcta ccagtcaaga gatcttccgc caacgcttca ggcatctccg ctaccaggag 300
actcctggtc cccgggaggc cttgagccaa ctacgagtac tctgctgtga gtggctgagg 360
ccaqaqaaac acacqaaqqa gcagatcctg gagttcctgg tgctggaaca attcttgacc 420
atcctgcctg aggageteca atcctgggtg eggggacate accetaagag tggagaggag 480
gctgtgactg tgctggagga tttagagaaa ggacttgaac cagagccgca gtcccagg
<210> 4276
<211> 300
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (59)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (231)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (262)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (275)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (282)
<223> n equals a,t,g, or c
<400> 4276
gcaggggaaa aaccctatgt gtgtgatagg tgtgggaagg ccttcaggaa acagctcang 60
cctcacagtg cataaaagga tccacacagg tgaaacccca ctatgaatgt gatgagtgtg 120
ggaaggcata catctcacac tcaagtctta ttcaatcata aaagtgtcca ccaggggaaa 180
gcagccctat tattgttgaa ttgttgggaa atccttccaa ttatgaatca ntcccttgaa 240
ccagcacaaa agggatcccc cnctgggaaa naaanccctc cnaattttaa gaagtttggg 300
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<210> 4277
<211> 405
<212> DNA
<213> Homo sapiens
<220>
<221> misc feature
<222> (335)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (347)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (377)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (383)
<223> n equals a,t,g, or c
<220>
<221> misc feature
<222> (402)
<223> n equals a,t,g, or c
<400> 4277
gccagggcct gagggggagg tttcctgaga actccggccc caggctggcc tgagctgccg 60
ggcagaggcc tgtgctggca acaggcattg ccgggcctgc agctcagagg gtcactggga 120
ctgagggcga tctgtggcct gaaaagcaaa tgcacagtta gtgcagctcc tgaccaggcc 180
ttcagggtgg acagagggag gatcggtcat ggcagccaca cctgggcctg gccttgctcc 240
gggacctgcc agaggagctg gcctggctct gtgcctgcct gcctccagga gcaggacggt 300
ggctgggagg gtagtgactg gggacacagg tgcangtgtt agtgcangac cggaagggtg 360
                                                                   405
aggtggcctg gtcctcnggg ctnctggcct gggctggctg angca
<210> 4278
<211> 108
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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3914

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4278

Asn Lys Lys Lys Asp Asn His Leu Leu Xaa Pro Val Gln Glu Asn Ala 1 5 10 15

Asn Ser Gly Tyr Tyr Glu Ala His Pro Val Thr Asn Gly Ile Glu Glu 20 25 30

Pro Leu Glu Glu Ser Ser His Glu Pro Glu Pro Glu Pro Glu Ser Glu
35 40 45

Thr Lys Thr Glu Glu Leu Lys Pro Gln Val Glu Glu Lys Asn Leu Glu 50 55 60

Glu Leu Glu Glu Lys Ser Thr Thr Pro Pro Pro Ala Glu Pro Val Ser 65 70 75 80

Leu Pro Gln Glu Pro Pro Lys Pro Arg Val Xaa Ala Lys Pro Glu Val 85 90 95

Gln Ser Gln Pro Pro Arg Val Arg Gly Thr Thr Thr 100 105

<210> 4279

<211> 59

<212> PRT

<213> Homo sapiens

<400> 4279

Gly Phe Pro Val Leu Phe His Ser Ala Phe Met Ser Gln Leu Pro Leu
1 5 10 15

Ile Pro Ser Lys Leu Ser Gln Val Glu Trp Pro Asn Pro Gly Met Met
20 25 30

Tyr Tyr Phe Leu Gln Ser Cys Asp Cys Leu Gly Gly Pro Phe Ala Asn 35 40 45

Phe Pro Arg Ala His Val Cys Leu Val Val Lys 50 55

<210> 4280

<211> 147

<212> PRT

<213> Homo sapiens

3915

<220> <221> SITE <222> (53) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (93) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (135) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4280 Arg Glu Phe Asp Gly Lys Pro Gly Leu Ala Gly Leu Ala Thr Pro Pro 5 Pro Pro Pro Pro His Gln Arg His Leu His Leu His Cys Pro Ala Lys 20 Leu Arg Leu Leu Pro Leu Gln Arg Gln Leu Ala Ser Arg His Arg Trp 40 Thr Pro Gly Ser Xaa Ser Asp Val Ala Arg Leu Ser Gly Lys Ser Val 55 Leu Pro Leu Pro Ile Ser Met Pro Ser Pro Ser Val Ser Pro Glu Ser 65 70 75 Ala Val Tyr Leu Ile Gly Pro Val Met Leu Thr Phe Xaa Ala Thr Ala Phe Ser Ser Lys Glu Phe Ser Ser His His Gly Val Ser Gly Pro Leu 105 Ala Ser Trp Ser Lys Val Gly Leu Gly Gly Arg Tyr Gly Ser Gly Met 115 120 Cys Tyr Arg Ser Tyr Gln Xaa Trp Gly Pro Leu Ser Val Ser Gly Ser 130 Glu Arg Val 145

<210> 4281

<211> 53

3916

<212> PRT

<213> Homo sapiens

<400> 4281

Pro Leu Trp Lys Thr Val Tyr Lys Thr Lys His Thr Val Phe Asn Ser 1 5 10 15

Ile Gly Ser Ile Ile Ile Val Tyr Tyr Arg Xaa Pro Leu Trp Lys Thr
20 25 30

Val Tyr Lys Thr Lys His Thr Val Phe Asn Ser Ile Gly Ser Ile Ile 35 40 45

Ile Val Tyr Tyr Arg
50

<210> 4282

<211> 45

<212> PRT

<213> Homo sapiens

<400> 4282

Ala Leu Ile Phe His Trp Gly Ser Ala Ile Thr Lys Asn Ser Ser Asp.
1 5 10 15

Ile Phe Gln Leu Pro Lys Trp Pro Gly Thr Phe Cys Phe Tyr Glu Asn 20 25 30

Arg Phe Ile Leu Tyr Phe Pro Val Cys Leu Leu Cys Leu 35 40 45

<210> 4283

<211> 58

<212> PRT

<213> Homo sapiens

<400> 4283

Ile Ala Ser Gly Arg Pro Phe Phe Phe Leu Ile Tyr Met Asn Leu Gln $1 \hspace{1cm} 5 \hspace{1cm} 10 \hspace{1cm} 15$

Ile Ile Tyr Ile Asn Leu Leu Cys Gly Asp Phe Gly Gln Glu Asp
20 25 30

Cys Leu Arg Pro Gly Ile Gln Asp Gln Pro Gly Lys Gln Ser Glu Thr 35 40 45

Leu Ser Leu Gln Lys Ile Lys Thr Lys Ile

3917

50 55

<210> 4284

<211> 65

<212> PRT

<213> Homo sapiens

<400> 4284

Val Phe Gln His Ser His Cys Thr Ser Ala Gly Asn Leu Ser Ile Leu 1 5 10 15

Tyr Arg Gln Ser Glu Leu Lys Ser Leu Met Ser Arg Asp Tyr Gly Leu 20 25 30

Asn Lys Leu Val Cys Pro Ile Gly Gly Lys Lys Pro Arg Asn His Leu 35 40 45

Leu Lys Arg Met Ile Cys His Ile Pro Leu Asp Phe His Phe Ala Leu 50 55 60

Tyr 65

<210> 4285

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4285

His Arg Ile His Phe Thr Tyr Leu Thr Ser Thr Ile Ser Ser Asp Thr 1 5 10 15

Phe Ser Met Lys Gln Thr Ile Ala Ile Phe Lys Ile Met Asn Leu Ser 20 25 30

Ile Ile Leu Pro Asn Ser Phe Xaa His Leu Cys Asn Phe Ser Leu Phe 35 40 45

Leu Leu Pro Leu Pro Val Pro Ser Gln Pro Leu Ile Cys Ser Gly Asn 50 55 60

Tyr Gln Ser Ser Phe Cys His Tyr Arg Leu Ile Cys Ile Phe Lys Glu

3918

 65
 70
 75
 80

Ile Tyr Ile His Gly Thr Ile His His Leu Cys Phe Val Val 85 90

<210> 4286

<211> 62

<212> PRT

<213> Homo sapiens

<400> 4286

Ala Glu Val Leu Leu Glu Ala Ile Arg Lys Gly Ile Gln Leu Arg Lys
1 5 10 15

Val Glu Glu Gln Arg Glu Gln Glu Ala Lys His Glu Arg Ile Glu Asn 20 25 30

Asp Val Ala Thr Ile Leu Ser Arg Arg Ile Ala Val Glu Tyr Ser Asp
35 40 45

Ser Glu Asp Asp Ser Glu Phe Asp Glu Val Asp Trp Leu Glu
50 55 60

<210> 4287

<211> 29

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4287

Cys Arg Leu Leu Arg Arg Thr Xaa Lys Leu Gly Phe Ser Gly Arg Met
1 5 10 15

Thr Xaa Leu Arg Asp Pro Leu Gln Ala Arg Thr Lys Phe 20 25

3919

<210> 4288 <211> 129 <212> PRT

<213> Homo sapiens

<400> 4288

Phe Leu Lys Glu Gly Ser Thr Pro Val Ser Asn Val Tyr Val Ser Met
1 5 10 15

Cys Val Cys Ala Ile His Met Tyr Ser His Glu Asp Arg His Gly Gln 20 25 30

Val Leu Glu Glu His Ser Ser Val Thr Ser Arg Ala Thr Gly Pro 35 40 45

Cys Arg Ala Val Val Tyr Ile Val Gln Leu Trp Arg Trp Asn Ser Ile 50 55 60

Phe Thr Leu Phe Tyr Gly Ala Phe Arg Val Pro Gly Phe His Leu Arg 65 70 75 80

Leu Ser Val Trp Met Ala Val Phe Arg Pro Pro Leu Thr Ser Leu Pro 85 90 95

Ser Ile Leu Tyr Phe Gly Gly Leu Leu Ser Cys Tyr Lys Thr Phe Tyr 100 105 110

Gln Val Lys His Arg Tyr His Leu Cys Phe His Ser His Trp Cys Lys 115 120 125

Tyr

<210> 4289 <211> 345

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (156)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (186)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

3920

<221> SITE <222> (209) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (288) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (301) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4289 Glu Ser Asp Gly Met Ala Leu Ile Thr Leu Arg Lys Asn Leu Tyr Arg 5 10 Leu Ser Asp Phe Gln Met His Arg Ala Leu Ala Ala Leu Lys Asn Lys Pro Leu Asn His Val His Lys Val Val Lys Glu Arg Leu Cys Pro Trp 40 Leu Cys Ser Arg Gln Pro Glu Pro Phe Gly Val Arg Phe His His Ala 55 His Cys Lys Lys Phe His Ser Lys Asn Gly Asn Asp Leu His Pro Leu 65 Gly Gly Pro Val Phe Ser Gln Val Ser Asp Cys Asp Arg Leu Glu Gln 90 Asn Val Lys Asn Glu Glu Ser Gln Met Phe Tyr Arg Arg Leu Ser Asn 105 Leu Thr Ser Ser Glu Glu Val Leu Ser Phe Ile Ser Thr Met Glu Thr 115 120 Leu Pro Asp Thr Met Ala Ala Gly Ala Leu Gln Arg Ile Cys Glu Val 130 135 Glu Lys Lys Asp Gly Asp Gln Gly Leu Pro Lys Xaa Ile Leu Glu Asn 150 155 Ser Ile Phe Gln Ala Leu Cys Phe Gln Phe Glu Lys Glu Pro Ser Gln 165 170 Leu Ser Asn Thr Ser Leu Val Thr Ala Xaa Gln Ala Leu Ile Leu Leu 180 · 185 190

3921

His Val Asp Pro Gln Ser Ser Leu Leu Leu Asn Leu Val Ala Glu Cys 200 Xaa Asn Arg Leu Arg Lys Gly Gly Met Glu Val Arg Asn Leu Cys Ile 210 215 Leu Gly Glu Ser Leu Ile Thr Leu His Ser Ser Gly Cys Val Thr Leu 225 230 Glu Leu Ile Ile Asn Gln Leu Gln Gly Glu Lys Leu Glu Thr Phe Thr 245 250 Pro Glu Asp Ile Val Ala Leu Tyr Arg Ile Leu Gln Ala Cys Thr Glu 265 260 Lys Val Asp Glu His Gln Thr Phe Leu Asn Lys Ile Asn Asn Phe Xaa 275 280 Leu Ser Ile Val Ser Asn Leu Ser Pro Lys Leu Ile Xaa Gln Met Leu 300 295 Thr Ala Leu Val Val Leu Asp Gln Ser Gln Ala Phe Pro Leu Ile Ile 310 315 Lys Leu Gly Lys Ile Cys Arg Glu Ala Cys Pro Thr Phe His Leu Thr 325 330 Arg Ser Leu Gly Glu Ser Phe Glu Ala 340 <210> 4290

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<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (76)
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4290
Glu Ser Pro Phe His Thr Val Glu Arg Cys Arg Cys Gly Lys Pro Gln
1 5 10 15
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3922 Arg Trp Leu Pro Ile Leu Asn Pro Phe Ile Ser His Leu Ser Phe Phe 25 Ser Pro Phe Cys Pro Asp Val Ala Met Val Gly Trp Val Arg Pro Glu 40 Glu Thr Ala Ser Xaa Arg Gly Ser Ser Arg Ser Gly Gly Ser Ala Gly 50 Ile Gly Ala His Arg Ser Glu Glu Trp Pro Met Xaa Leu Pro Ser Lys 75 Cys Ala <210> 4291 <211> 72 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (66) <223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4291

Leu Ser Ile Cys Ile Ile Asn Ile Ile Met Met Phe Phe Ser Cys Ser
1 5 10 15

Phe Gln Gly Leu Ser His Leu Lys Lys Leu Leu Leu Thr Lys Leu Leu 20 25 30

Thr Leu Phe Pro Leu Met Ile Gln Val Ser Val Pro Ala Leu Tyr Val 35 40 45

Asn Tyr Gln Asn Ser Pro Ala Ser Glu His Asp Ile Tyr Asn Arg Arg 50 55 60

Tyr Xaa Asn Lys Met Xaa Xaa Leu

3923

65 70

<210> 4292

<211> 40

<212> PRT

<213> Homo sapiens

<400> 4292

His Ile Asn Asn Ile Lys Met Ala Ile Pro Phe Tyr Gly Val Thr Leu
1 5 10 15

Phe Leu Gly Ile Val Ser Lys Glu Ile Ile Leu Asn Ile Gly Lys Lys 20 25 30

Tyr Phe Tyr Asn Leu Gln Ser Val 35 40

<210> 4293

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (17)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4293

Ala Val Ala Leu Met Ala Pro Pro Ser Gly Met Ile Arg Val Thr Ala 1 5 10 15

Xaa Arg Gly Ser Phe Glu Trp Arg Pro Ala Gly Gly Asp Pro Asn Arg 20 25 30

Arg Ala Gly Arg Arg Pro Phe Ser Arg Glu Gly Pro Ile Trp Arg Lys
35 40 45

Ser Ser Arg Leu Val Lys Leu Gly Gly Arg 50 55

<210> 4294

<211> 39

<212> PRT

<213> Homo sapiens

3924

<400> 4294

Pro Tyr Arg Ser Ser Lys Asn Ser Met Pro Phe Arg Leu Ala His Tyr 1 5 10 15

Gln Lys His His Glu Ser Ile Leu Lys Thr Asn Tyr Leu Leu Gln Cys 20 25 30

Ile Ser Leu Val Leu Cys Val 35

<210> 4295

<211> 104

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4295

Gly His Ile Phe Ser Leu Lys Ser Asp Ile Leu Ser Leu Leu Ser 1 5 10 15

His Tyr Cys His Thr Phe Val Phe Phe Val Val Ile Val Trp Val Glu 20 25 30

Gln Leu Gln Glu Thr Leu Lys Pro Leu Asp Ile Lys Glu Ile Cys Leu 35 40 45

Leu Ile Phe Lys Ser Phe Leu Ser Lys Ser Trp Asp Thr His Gly Ser 50 55 60

Cys Leu Gly Asn Phe Pro Cys Cys Tyr Arg Ala Ala Thr Lys Trp Glu 65 70 75 80

Leu Thr Arg Arg Ala Val Tyr Thr Val Ser Leu Ala Thr Val Ala Xaa 85 90 95

Gly Ser Gly Ile Trp Leu Thr Gly
100

<210> 4296

<211> 74

<212> PRT

<213> Homo sapiens

PCT/US00/26524 WO 01/22920

3925 <220> <221> SITE <222> (70) <223> Xaa equals any of the naturally occurring L-amino acids Glu Val Asp Leu Gly Val Ser Trp Arg Val Ser Leu Leu Val Ala Gly Gly Arg Asp Ser Trp Leu Trp Gly Trp Arg Glu Val Val Gly Arg Lys Arg Gly Cys Val Pro Ala Thr Arg Ile Cys Ile Pro Glu Pro Lys Pro 40 Gly Gly Ile Ser Leu Arg Gln His His Pro Arg Glu Ile Cys His Asn 50 55 Leu Arg Phe Thr Ala Xaa Asp Ala Glu Ala 70 <210> 4297 <211> 53 <212> PRT <213> Homo sapiens <400> 4297 Gln Val Gln Ala Ala Glu Gln Pro Lys Pro Leu Cys Leu Trp Ser 5 10 Arg His Ser Leu Phe Leu Cys Phe Leu Asp Glu Leu Ala Phe Thr Leu 20 25 Leu Tyr Gly Leu Ala Pro Asn Ser Leu Leu Arg Glu Ile Gln Glu Pro 40 Ser Phe Gly Ser Ala 50 <210> 4298 <211> 55 <212> PRT <213> Homo sapiens

<220> <221> SITE <222> (14)

3926

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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4298
Ser Asn Val Pro Lys Thr Ser Lys Gln Asn Leu Ile Pro Xaa Lys Tyr
                  5
                                     10
Ala Leu Phe Leu Leu Ile Cys Phe Val Leu Gln Leu Arg Ser Lys Ser
             20
Leu Val Lys Leu Tyr Tyr Leu Pro Lys Tyr Lys Arg Xaa Leu Glu Leu
                             40
His Cys Asn Ile Asp Val Leu
     50
<210> 4299
<211> 41
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4299
Met Gly Gly Leu Ile Ala Leu Ala Arg Glu Ala Ala Gly Lys Glu Asp
                  5
Arg Trp His Pro Glu Thr Ala Gln Xaa Trp Asn Arg Thr Pro Xaa Val
Gln Gly Leu Lys Phe His Gly Leu Val
         35
                             40
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<210> 4300 <211> 79

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4300
Gln Ala Ala Arg Gly His Pro His Pro Ala Phe Xaa Arg Gln Phe
Asp Arg Gly Glu Arg Gly Pro Ala Gly Leu Leu Cys Trp Ala Trp
             20
                                 25
                                                     30
Gln Pro Pro Pro Glu Lys Met Glu Phe Arg Thr Ala Ser Ile Arg Leu
         35
                             40
Phe Gly His Leu Thr Arg Ser Ala Thr Glu Thr Val Arg Thr Ser Ser
                         55
Trp Thr Lys Trp Trp Ala Gly Trp Arg Pro Ala Ala Ala Pro Xaa
                     70
<210> 4301
<211> 67
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
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3928

<220> <221> SITE <222> (60) <223> Xaa equals any of the naturally occurring L-amino acids Thr Ser Ser Leu Leu Gln Ala His Ser Leu Ile Glu Ser Leu Val Ile 10 Asn Leu Leu Asn Ala Xaa Xaa Ala Ala Asn Leu Gly Lys Leu Leu Ser Trp Trp Gly His Cys Trp Ile Asn Asn Val Arg Tyr Glu Leu Ser Asp 40 Ala Leu Thr Trp Ile Leu His Phe Lys Val Xaa Xaa Gly Ala Tyr Gly 50 Gln Pro Thr 65 <210> 4302 <211> 134 <212> PRT <213> Homo sapiens <400> 4302 Pro Asp Gln Pro Tyr Glu Trp Leu Ser Tyr Lys Gln Val Ala Glu Leu 5 10 Ser Glu Cys Ile Gly Ser Ala Leu Ile Gln Lys Gly Phe Lys Thr Ala Pro Asp Gln Phe Ile Gly Ile Phe Ala Gln Asn Arg Pro Glu Trp Val 40 Ile Ile Glu Gln Gly Cys Phe Ala Tyr Ser Met Val Ile Val Pro Leu 55 Tyr Asp Thr Leu Gly Asn Glu Ala Ile Thr Tyr Ile Val Asn Lys Ala 65 70 75 Glu Leu Ser Leu Val Phe Val Asp Lys Pro Glu Lys Ala Lys Leu Leu 85 90 Leu Glu Gly Val Glu Asn Lys Leu Ile Pro Gly Leu Lys Ile Ile Val

105

Val Met Asp Ala Tyr Gly Ser Asn Trp Trp Asn Glu Ala Arg Gly Val

3929

115 120 125

Gly Trp Lys Ser Pro Ala 130

<210> 4303

<211> 355

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (347)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4303

Cys Ile Ser Leu Xaa Pro Asn Ile Ser Leu Arg His Leu Trp Pro Gln
1 5 10 15

Arg Met Cys Pro Ser Gly Val Val Met Ile Thr Trp Gly Met Ser Arg 20 25 30

His Pro Gln Val Leu Gln Ala Thr Gln Glu Thr Leu Gln Arg His Gly 35 40 45

Ala Gly Ala Gly Gly Thr Arg Asn Ile Ser Gly Thr Ser Lys Phe His 50 55 60

Val Glu Leu Glu Gln Glu Leu Ala Glu Leu His Gln Lys Asp Ser Ala 65 70 75 80

Leu Leu Phe Ser Ser Cys Phe Val Ala Asn Asp Ser Thr Leu Phe Thr
85 90 95

Leu Ala Lys Ile Leu Pro Gly Cys Glu Ile Tyr Ser Asp Ala Gly Asn 100 105 110

His Ala Ser Met Ile Gln Gly Ile Arg Asn Ser Gly Ala Ala Lys Phe 115 120 125

Val Phe Arg His Asn Asp Pro Asp His Leu Lys Lys Leu Leu Glu Lys 130 135 140

Ser Asn Pro Lys Ile Pro Lys Ile Val Ala Phe Glu Thr Val His Ser

3930

150 155 145 Met Asp Gly Ala Ile Cys Pro Leu Glu Glu Leu Cys Asp Val Ser His 165 170 Gln Tyr Gly Ala Leu Thr Phe Val Asp Glu Val His Ala Val Gly Leu 185 Tyr Gly Ser Arg Gly Ala Gly Ile Gly Glu Arg Asp Gly Ile Met His 200 205 195 Lys Ile Asp Ile Ile Ser Gly Thr Leu Gly Lys Ala Phe Gly Cys Val 215 Gly Gly Tyr Ile Ala Ser Thr Arg Asp Leu Val Asp Met Val Arg Ser 235 Tyr Ala Ala Gly Phe Ile Phe Thr Thr Ser Leu Pro Pro Met Val Leu 245 250 Ser Gly Ala Leu Glu Ser Val Arg Leu Leu Lys Gly Glu Glu Gly Gln 260 265 Ala Leu Arg Arg Ala His Gln Arg Asn Val Lys His Met Arg His Tyr 280 Ser Trp Thr Gly Ala Phe Leu Ser Ser Pro Ala Pro Ala Thr Ser Ser 300 295 Pro Ser Gly Trp Ala Met Gln His Ser Thr Ala Ser Ser Val Ile Ser 305 310 315 320 Cys Ser Pro Ser Met Ala Ser Met Cys Arg Pro Ser Thr Thr Gln Leu 325 330 Ser Pro Gly Val Lys Ser Ser Cys Ala Trp Xaa Pro Pro Pro Thr Thr 350 345 340 Ala Leu Arg 355

<210> 4304

<211> 161

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (91)

3931

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (136) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (138) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (140) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4304 Thr Lys Glu Lys Lys Asn Arg Gln Gly Asn Ser Leu Asp Met Ala Ser 10 Glu Ile His Met Thr Gly Pro Met Cys Leu Ile Glu Asn Thr Asn Gly 25 Arg Leu Met Ala Asn Pro Glu Ala Leu Lys Ile Leu Ser Ala Ile Thr 40 Gln Pro Met Val Val Val Ala Ile Val Gly Leu Tyr Arg Thr Gly Lys 50 55 Ser Tyr Leu Met Asn Lys Leu Ala Gly Lys Lys Gly Phe Ser Leu 75 65 70 Gly Ser Thr Val Gln Ser His Thr Lys Gly Xaa Trp Met Trp Cys Val 90 Pro His Pro Lys Lys Pro Gly His Ile Leu Val Leu Leu Asp Thr Glu 100 Gly Leu Gly Asp Val Glu Lys Gly Asp Asn Gln Asn Asp Ser Trp Ile 115 120 Phe Ala Leu Ala Val Leu Leu Xaa Ser Xaa Phe Xaa Tyr Asn Ser Ile 135 Gly Thr Ile Asn Gln Gln Ala Met Asp Gln Leu His Tyr Gln Ser Arg 145 150 155 Ser

3932

<210> 4305 <211> 109 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (97) <223> Xaa equals any of the naturally occurring L-amino acids Val Leu His Ser Val Leu Gly Gly Trp Leu Gly Pro Gly Ala Val Ala Ser Gln Gly Ala Ala Ser Pro Trp Gln Ala Ser Leu Pro Trp Ala Ala 25 Leu Pro Gln Thr Pro Asp His Pro Leu Gly Pro Val Pro His Gln Ser 40 Pro Ser Ser Cys Leu Trp Gly Ser His His Gly Val Arg Ala Val His 50 55 Ser Ala Ser Gln Cys Val Ser Pro Gly Thr Trp Glu Gly Arg Glu His Trp Gly Leu Gly Pro Gln Leu Arg Gly Cys Leu Ala Leu Pro Ser Asp 85 90 Xaa Ala Tyr Pro Glu Phe Gly Gly Tyr Phe Pro Leu Ala 100 105 <210> 4306 <211> 36 <212> PRT <213> Homo sapiens

<400> 4306

Leu Phe Leu Ser Ser Pro Gly Leu Glu Arg Val Thr Met Leu Phe Leu 1 5 10 15

Gly Leu His Asn Val Arg Gln Thr Ser Met Phe Pro Arg Asp Pro Lys
20 25 30

Arg Leu Thr Pro

3933

<210> 4307 <211> 89 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids Gly Gln Pro Glu Val Thr Phe Ile Ala Ile Leu Val Leu Val Ser Phe 10 Phe Thr Ala Ala Cys Phe Ile Ile Lys Val Phe Ile Thr Cys Ile Leu 25 Cys Arg Pro Pro Val Ser Ser Cys Asp Leu Glu Cys Leu Thr Ser Trp 40 Glu Cys Ser Pro Val Gly Leu Ser Leu Ile Leu Leu His Pro Leu Ile 50 55 Gln Asp Gly Ser Phe Ser Gly Phe Gln Thr Thr Pro Gly His Val Phe 65 75 Pro Pro Pro Phe Leu Gln Gln Xaa Pro 85 <210> 4308 <211> 69 <212> PRT <213> Homo sapiens <400> 4308 Met Phe Leu Ile Val Phe Cys Phe Leu Gln Ser Leu Ser Ala Met Pro 10 Ile Val Leu Ile Phe Tyr Arg Ser Ser Leu Lys Ile Leu Asn Arg Gly 25 Ile Gly Ser Gly Gln Ser Glu Trp Leu Glu Phe Trp Leu Ser Lys 40

Asn Phe Ile Leu His Lys His Val Val Arg Ser Phe Cys Ala Tyr Ala

55

3934

Ala Trp Ile Gly Cys 65

<210> 4309

<211> 74

<212> PRT

<213> Homo sapiens

<400> 4309

Ser Phe Leu Phe His Tyr Phe Cys Tyr Phe Lys Cys Ile Ser Ser Gly
1 5 10 15

Ile Leu Phe Gly Ala Ile Pro Thr Lys Ser Gly Thr Arg Met Cys Leu 20 25 30

Arg Ala Val Thr Phe Gln His Asp Gly Phe Gly Leu Val Trp Phe Cys
35 40 45

Val Leu Phe Ile Cys Ser Phe Phe Cys Cys Asn Arg Lys Trp Leu Gly 50 55 60

Ser Leu Arg Trp Tyr Val Thr Asn Ser Phe 65 70

<210> 4310

<211> 171

<212> PRT

<213> Homo sapiens

<400> 4310

Met Leu Ser Pro Pro Arg Thr Thr Gly Ser Met Thr Ser Trp Gly 1 5 10 15

Thr Cys Gly Ser Gly Gln His His Arg Thr Arg Leu Leu Ser Arg Thr 20 25 30

Cys Ala Ser Ser Gly Gly His Pro Gly Ser Thr Gln Leu Met Ala Leu 35 40 45

Pro Ile Thr Gly Pro Gly Ser Pro Pro Gly Trp Ala Thr Leu Gln Ile 50 55 60

Gln Pro Gln Thr Thr Ser Val Ser Ala Val Leu Gln Thr Gln Ala Gly
65 70 75 80

Arg Gln Gly Ser Cys Lys Gln Pro Gly Gly Asp Lys Glu Lys Ser Leu 85 90 95

3935

Leu Gly Ser Leu Ser Phe Pro Gly His Val Ala Asn Ser Ala Ile Pro
100 105 110

Ser Ser Arg Ala Ser Ala Ser Gly Lys Asn Phe Pro Phe Pro Val Ser 115 120 125

His Pro Ser Val Ala Gly Ala Ser His Gln Gly Arg Arg Gly Leu Ser 130 135 140

Leu Leu Cys Phe Gly Glu Gly Ala Gln Cys Val Leu Thr Met Ala Gly 145 150 155 160

Gly Gln Val Phe Leu Leu Glu Ala Lys Tyr Tyr 165 170

<210> 4311

<211> 44

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4311

Ser Ser His Leu Ser Leu Asn Glu Ala Val Val Ile Ser Gly Arg Lys
1 5 10 15

Leu Ala Gl
n Gl
n Ile Lys Gl
n Glu Val Arg Gl
n Xaa Val Glu Asp Gly 20 2530

Val Gly Ser Arg Gln Gln Thr Ala Thr Pro Glu Cys $35 \hspace{1cm} 40$

<210> 4312

<211> 74

<212> PRT

<213> Homo sapiens

<400> 4312

Arg Phe Lys Ser Arg Leu Ser Ile Leu Leu Ser Ile Leu Phe His Phe 1 5 10 15

Lys Lys Lys Gly Phe Gly Ile Cys Gln Pro Leu Leu Ser Leu Leu Tyr 20 25 30

3936

Lys Ala Thr Ala Leu Val Leu Asp Ile Met Pro Gly Leu Ile Ser Gln
35 40 45

Thr Ser Gly Leu Asn Gln Val His Ala Trp Leu Leu Lys Lys Leu Met 50 55 60

Leu Ile Pro Lys Ser Ala Gln Ser Gln Pro 65 70

<210> 4313

<211> 103

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (92)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4313

Ala Gln Val Asp Phe Arg Arg Thr Pro Ile Asp Ser Thr Ala Ala Pro 1 5 10 15

Gly Ala Gln Thr Pro Ala Ala Arg Ser Lys Ala Arg Ser Cys Cys Ser 20 25 30

His Val Gly Pro Gln Pro Pro His Ser Gly Pro Ala His Gly Xaa Pro 35 40 45

Pro Ala Ser Cys Gln Gln Gly Leu Gly Asn Phe Ser Pro Gly Cys Arg
50 55 60

Ala Leu Ser Arg Trp Pro Cys Ser Trp Ser Ser Leu Gln Ser Pro Leu 65 70 75 80

Gln Ser Thr Thr Ser Gly Ala Arg Arg Ser Arg Xaa Trp Glu Ser Trp 85 90 95

Trp Gly Thr Asp Trp Lys Val 100

3937

<210> 4314 <211> 126 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4314 Pro Arg Pro Arg Gly Ala Gly Ala Met Val Arg Gly Arg Xaa Phe Arg 10 Leu Ser Val Arg Asp Val Arg Phe Pro Thr Ser Leu Gly Gly His Gly 20 25 Ala Asp Ala Met His Thr Asp Pro Asp Tyr Ser Ala Ala Tyr Val Val 35 40 Ile Glu Thr Asp Ala Glu Asp Gly Ile Lys Gly Cys Gly Ile Thr Phe 55 Thr Leu Gly Lys Gly Thr Xaa Val Val Cys Xaa Val Asn Ala Leu 70 75 Ala His His Val Leu Asn Lys Asp Leu Lys Asp Ile Val Gly Asp Phe Arg Gly Phe Tyr Arg Gln Leu Thr Ser Asp Gly Gln Leu Arg Trp Ile 100 105 110 Gly Pro Glu Lys Gly Val Val His Leu Ala Thr Xaa Pro Ser 115 120

3938

<210> 4315 <211> 39 <212> PRT <213> Homo sapiens <400> 4315

Trp Ile Lys Asp Leu Asn Val Arg Pro Glu Ser Met Lys Leu Leu Glu 1 5 10 15

Glu Asn Ile Trp Glu Thr Leu Gln Tyr Pro Gly Leu Gly Glu Asp Phe \$20\$ \$25\$ \$30

Met Glu Lys Thr Ser Lys Ala 35

<210> 4316 <211> 84 <212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4316

Ala Pro Ala Gly Leu Arg Arg Ser Pro Trp Arg Cys Gly Ala Ile Gly
1 5 10 15

Gly Asp Gly Arg Gly Ala Ser Thr Val Ser His Pro Pro Leu 20 25 30

Ala Thr Leu Ile Phe Leu Leu His Leu Gly Pro Gly Ala Ser Ser Thr 35 40 45

Thr Gln Ala Gly Cys Phe Lys Lys Asn Cys Phe Leu Lys Cys Leu Ser 50 55 60

Leu Lys Glu Ile Ser Leu Thr Leu Glu Val Xaa Gly Ala Ser Ser Gln 65 70 75 80

Tyr Thr Ser Cys

<210> 4317 <211> 209

3939

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (97) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (104) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4317 Trp Xaa Cys Ile Leu Asn Ile Leu Lys Gly Tyr Asn Phe Ser Arg Glu 10 Ser Val Glu Ser Pro Glu Gln Lys Gly Leu Thr Tyr His Arg Ile Val 25 20 Glu Ala Phe Arg Phe Ala Tyr Ala Lys Arg Thr Leu Leu Gly Asp Pro 40 Lys Phe Val Asp Val Thr Glu Val Val Arg Asn Met Thr Ser Glu Phe Phe Ala Ala Gln Leu Arg Ala Gln Ile Ser Asp Asp Thr Thr His Pro 70 75 Ile Ser Tyr Tyr Lys Pro Glu Phe Tyr Thr Pro Asp Asp Gly Gly Thr 85 Xaa His Leu Ser Val Val Ala Xaa Asp Gly Ser Ala Val Ser Ala Thr 100 105 Ser Thr Ile Asn Leu Tyr Phe Gly Ser Lys Val Arg Ser Pro Val Ser 125 120 Gly Ile Leu Phe Asn Asn Glu Met Asp Asp Phe Ser Ser Pro Ser Ile 130 135 140 Thr Asn Glu Phe Gly Val Pro Pro His Leu Pro Ile Ser Ser Ser Gln 145 Gly Ser Ser Arg Ser Arg Pro Cys Ala Arg Arg Ser Trp Trp Ala Arg 175 165 170

3940

Thr Ala Arg Ser Gly Trp Trp Glu Leu Leu Gly Ala His Arg Ser 180 185 190

Pro Arg Pro Leu His Trp Pro Ser Ser Thr Thr Ser Gly Ser Ala Met 195 200 205

Thr

<210> 4318

<211> 47

<212> PRT

<213> Homo sapiens

<400> 4318

Met Phe Asn Glu Leu Glu Asn Asp Ser Trp Val Val Asn Ile Val Asn 1 5 10 15

Val Asp Glu Leu Phe Ser Phe Ala Glu Ser Ser Tyr Phe Val Gly Gly 20 25 30

Phe Asn Ser Ala Trp Gln Phe Ala Ala Phe Leu Val Val Leu Leu 35 40 45

<210> 4319

<211> 297

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (183)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4319

Pro Leu Pro Pro Gln Leu Gln Thr Pro Pro Arg Ser Asn Ser Val Phe 1 5 10 15

Ala Val Asn Gln Ala Val Ser Pro Asn Phe Ser Gln Gly Ser Ala Ile 20 25 30

Ile	Ile	Ala 35	Ser	Pro	Val	Gln	Pro 40	Val	Leu	Gln	Gly	Met 45	Val	Gly	Met
Ile	Pro 50	Val	Ser	Val	Val	Gly 55	Gln	Asn	Gly	Asn	Asn 60	Phe	Ser	Thr	Pro
Pro 65	Arg	Gln	Val	Leu	His 70	Met	Pro	Leu	Thr	Ala 75	Pro	Val	Cys	Asn	Arg 80
Ser	Ile	Pro	Gln	Phe 85	Pro	Val	Pro	Pro	Lys 90	Ser	Gln	Lys	Ala	Gln 95	Gly
Leu	Arg	Asn	Lys 100	Pro	Cys	Ile	Gly	Xaa 105	Gln	Val	Asn	Asn	Leu 110	Val	Asp
Ser	Ser	Gly 115	His	Ser	Val	Gly	Cys 120	His	Ala	Gln	Lys	Thr 125	Glu	Val	Ser
Asp	Lys 130	Ser	Ile	Ala	Thr	Asp 135	Leu	Gly	Lys	Lys	Ser 140	Glu	Glu	Thr	Thr
Val 145	Pro	Phe	Pro	Glu	Glu 150	Ser	Ile	Val	Pro	Ala 155	Ala	Lys	Pro	Суз	His 160
Arg	Arg	Val	Leu	Cys 165	Phe	Asp	Ser	Thr	Thr 170	Ala	Pro	Val	Ala	Asn 175	Thr
Gln	Gly	Pro	Asn 180	His	Lys	Xaa	Val	Ser 185	Gln	Asn	Lys	Glu	Arg 190	Asn	Ala
Val	Ser	Phe 195	Pro	Asn	Leu	Asp	Ser 200	Pro	Asn	Val	Ser	Ser 205	Thr	Leu	Lys
Pro	Pro 210	Ser	Asn	Asn	Ala	Ile 215	Lys	Arg	Glu	Lys	Glu 220	Lys	Pro	Pro	Leu
Pro 225	Lys	Ile	Leu	Ser	Lys 230	Ser	Glu	Ser	Ala	Ile 235	Ser	Arg	His	Thr	Thr 240
Ile	Arg	Glu	Thr	Gln 245	Ser	Glu	Lys	Lys	Val 250	Ser	Pro	Thr	Glu	Ile 255	Val
Leu	Glu	Ser	Phe 260	His	Lys	Ala	Thr	Ala 265	Asn	Lys	Glu	Asn	Glu 270	Leu	Cys
Ser	Asp	Val 275	Gly	Lys	Thr	Glu	Lys 280	Ser	Arg	Lys	Phe	Lys 285	Thr	Ile	Tyr
Тгр	Ala 290	Ala	Lys	Trp	Gly	Phe 295	Ala	Lys							

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<210> 4320
<211> 131
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4320
Trp Xaa Pro Arg Ala Ala Gly Ile Arg His Glu Leu Glu Ser Phe Ala
Val Pro Asn Leu Trp Lys Ser Glu Asp Ile Thr Gln Ile Val Ala Asn
                                 25
Tyr Gly Leu Ile Cys Xaa Thr Arg Ala Gly Asn Asp Ala Gln Lys Phe
         35
                             40
                                                  45
Ile Tyr Glu Ser Asp Val Leu Trp Lys His Arg Ser Asn Ile His Val
Val Asn Glu Trp Xaa Ala Asn Asp Ile Ser Ser Thr Lys Ile Arg Arg
                     70
                                         75
Ala Leu Arg Arg Gly Gln Ser Ile Arg Tyr Leu Val Pro Asp Leu Val
                                     90
                 85
Gln Glu Tyr Ile Glu Lys His Asn Leu Tyr Ser Ser Glu Ser Glu Asp
            100
                                105
Arg Asn Ala Gly Val Ile Leu Ala Pro Leu Gln Arg Asn Thr Ala Glu
                                                 125
        115
                            120
Ala Lys Thr
    130
```

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<210> 4321
<211> 75
<212> PRT
<213> Homo sapiens
<400> 4321
Asp His Pro Arg Thr Ile Ser Ser Arg Ile Leu Gln Trp Leu Asp Glu
Glu Leu Pro Asp Leu Ser Val Ser Arg Arg Ser Ser His Leu His Trp
                                 25
Gly Ile Pro Val Pro Gly Asp Asp Ser Gln Thr Ile Tyr Val Trp Leu
         35
                             40
Asp Ala Leu Val Asn Tyr Leu Thr Val Ile Gly Tyr Pro Asn Ala Glu
Phe Lys Ser Trp Trp Pro Ala Thr Leu Ile Ser
                     70
<210> 4322
<211> 93
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4322
Ser Met Trp Gly Lys Glu Arg Ser Asp Cys Tyr Cys Val Cys Val Glu
                                      10
Lys Glu Asp Ile Arg Asn Ser Ile Leu Ile Cys Thr Lys Lys Asn Cys
             20
                                  25
Phe Cys Phe Glu Met Leu Leu Ala Tyr Asn Phe Ser Pro Asn Ser Val
         35
Leu Thr Glu Thr Cys Ala Val Met Asp Gln Ser Leu Met Asp Leu Gly
                          55
                                              60
```

3944

Leu Cys Arg Met Cys Leu Val Asn Asn Met Phe Gly Arg Arg Xaa Ala 65 70 75 80

Leu Gly Arg Ser His Arg Pro Phe Xaa His Ser Pro Val 85 90

<210> 4323

<211> 133

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (115)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4323

Pro Ala Gly Pro Gly Gln Lys Pro Asp Pro Gly Lys Leu Pro Ala Ala 1 5 10 15

Gly Val Leu Arg Ile Xaa Arg Gly Ser Ser Gly Leu Trp Lys Lys Arg
20 25 30

Arg Ala Thr Asp Phe Gly Arg Gly Arg Ala Gly Leu Ser Ala Ala Met
35 40 45

Ser Ala Lys Ala Ile Ser Glu Gln Thr Gly Lys Glu Leu Leu Tyr Lys 50 55 60

Phe Ile Cys Thr Thr Ser Ala Ile Gln Asn Arg Phe Lys Tyr Ala Arg 65 70 75 80

Val Thr Pro Asp Thr Asp Trp Ala Arg Leu Leu Gln Asp His Pro Trp 85 90 95

Leu Leu Ser Gln Asn Leu Val Val Lys Pro Asp Gln Leu Asp Gln Thr 100 105 110

Ser Trp Xaa Asn Leu Val Phe Val Gly Val Gln Pro His Ser Gly Trp 115 120 125

Gly Gln Val Leu Gly 130

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<210> 4324
<211> 85
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4324
Leu Glu Arg Xaa Gly Ala Gly Gly Arg Asp Phe Trp Val Pro Val Cys
Cys Arg Gly Leu His Val Ile Ser Met Glu Lys Ala Val Tyr Ala Val
                       25
            20
Thr Gln Ser Leu Val Arg Gly Gln Ala Pro Gly Gly Gly Ser Ser
        35
Cys Gly Ser His Ser Pro Arg Lys Pro Pro Leu Pro Ser Val Ser Gln
                         55
Ile Asp Arg Glu Ser Arg Asp Ser Asp Arg Gln Val Thr Ser Gln Ile
                                        75
                    70
Glu Ser Ile Phe Val
                 85
<210> 4325
<211> 88
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4325
Pro Pro Leu Thr Leu Asp Ser Asn Pro Val Val Ile Leu Gly Trp Asp
           5
                                    10
Leu Gly Ala Cys Arg Trp Leu Arg Ser Gln Pro Leu Val Ile Arg Ala
             20
                                25
```

3946

Thr Ser Leu Ala Leu Gly Ala Leu Ala Pro Ala Glu Pro Leu Val His
35 40 45

Arg Thr Ala Trp Glu Pro Gly Arg Gly Leu Trp Gln Pro Pro Arg Ala 50 55 60

Glu Val Gln Thr Leu Phe Arg Leu Thr Gln Val His Thr Trp Ile Gly 65 70 75 80

Leu Gly Val Glu Ala Trp Phe Xaa

<210> 4326

<211> 71

<212> PRT

<213> Homo sapiens

<400> 4326

Val Phe Gln Gly Ile Ser Gln Arg Gln Ser Val Gln Gln Trp Asp Ile 1 5 10 15

Asn Ala Tyr Leu His Phe Pro Thr Ala Ile Tyr Ile Lys Cys Tyr Ser 20 25 30

Ile Gln Arg Met Pro Phe Ile Pro Thr Leu Lys His Arg Ser Leu Ser 35 40 45

Asn Lys Asn Gln Ile Val Cys His Ser Asn Tyr Asn Cys Ser Tyr Phe 50 55 60

Cys Met Val Arg Val Arg Cys 65 70

<210> 4327

<211> 58

<212> PRT

<213> Homo sapiens

<400> 4327

Asn Phe Gly Gln Val Phe Val Tyr Gln Tyr Phe Val Leu Leu Gly Asn 1 5 10 15

Ile Leu Phe Phe Ser Tyr Leu Cys Gln Ile Ile Ile Ile Lys Gly Thr
20 25 30

Ala Glu Asn Ile Pro Cys Phe Tyr Ile Gly Ser His Leu Tyr Leu Gly 35 40 45

3947

Gly Thr Leu Ser Ile Tyr Ile Leu Phe Val
50 55

<210> 4328

<211> 79

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4328

His Arg Lys Lys His Phe Leu Lys Pro Thr Val Ser Asp Gln Trp Gly
1 5 10 15

Lys Gln Gln Lys Thr Lys Arg Arg Ile Phe Pro Leu Ile Phe Leu Gln
20 25 30

Lys Ser Ile Ser Leu Ile Ala His Cys His Lys Phe Cys Leu Val Leu 35 40 45

Arg Glu Ala Thr Cys Thr Gly Ser Phe Tyr Val Gln Arg Lys Asp Phe 50 55 60

Thr Ile Lys Lys Ile Asn Leu Ala Arg Xaa Gly Val Ser His Trp 65 70 75

<210> 4329

<211> 41

<212> PRT

<213> Homo sapiens

<400> 4329

Pro Leu Gly His His Gln Val Pro Leu Thr Thr Lys Leu Ser Val Lys
1 5 10 15

Lys Thr Glu Asp Gly Asn Thr Leu Val Phe Ile Val Asn Val Lys Ala 20 25 30

Asn Lys His Arg Ile Lys Gln Ala Ser 35 40

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<210> 4330
<211> 120
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4330
Ile Arg His Arg His Gly Cys Pro Ser Val Leu Arg Met Gly Ser Xaa
                                     10
Gln Val Gly Xaa Xaa Gly Cys Trp Gln Asn Arg Arg Ile Pro Ser Phe
             20
                                  25
                                                      30
Ala Glu Trp Gly Thr Cys Ser Glu Pro Ala Gln Xaa Pro Gly Leu Leu
         35
Gln Val Lys Leu Asp Gly Arg Pro Arg Ser Gln Phe Leu Ser Thr Arg
                         55
Arg Gly Arg Cys Leu Glu Pro Leu Pro Thr Phe Ser Trp Met Gly Glu
                     70
                                          75
Ala Ser Gln Glu Ser Lys Gln Cys Cys Pro His Gly Arg Arg Thr Glu
                 85
Arg Leu Gly Lys Leu Gly Ser Thr Ser His Pro Glu Arg Leu Leu Glu
                                 105
                                                     110
            100
Thr Pro Gln Leu Glu Ser Pro Gly
        115
                             120
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<210> 4331
<211> 92
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4331
Gly Met Pro Thr Ala Ser Gln Arg Val Gly Gly Leu Cys Thr Leu
                                     10
Ser Thr Asn Leu Pro Pro Thr Arg Leu Leu Thr Thr Ala Pro Arg Arg
             20
                                 25
                                                      30
Leu Ser Asn Ser Val Ser Cys Pro Arg Gly Arg Gly Leu Pro Val Glu
                             40
Xaa Pro Met Cys Leu Pro Leu Val Gln Pro Ala Ala Arg Lys Trp Val
                         55
Thr Ala Thr Gly Leu Gly Trp Ala Arg Pro Gly Ser Gly Arg Cys Gly
                     70
                                         75
Ile Gly Glu Thr Thr Ala Pro Val Val Ser Ser Ala
                 85
                                     90
<210> 4332
<211> 136
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids
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3950

<220> <221> SITE <222> (133) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4332 Cys Lys His Asp Gly Trp Gly Lys His Ser Asn Cys Thr His Gln Gln Asp Ala Gly Val Thr Cys Ser Asp Gly Ser Asn Leu Glu Met Arg Leu 25 Thr Arg Gly Gly Asn Met Cys Ser Gly Arg Ile Glu Ile Lys Phe Gln 35 Gly Arg Trp Gly Thr Val Cys Asp Asp Asn Phe Asn Ile Asp His Ala 55 Ser Val Ile Cys Arg Gln Leu Glu Cys Gly Ser Ala Val Ser Phe Ser 75 70 Gly Ser Ser Asn Phe Gly Xaa Xaa Ser Gly Pro Ile Trp Phe Asp Asp 85 90 95 Leu Ile Cys Asn Gly Asn Glu Ser Ala Leu Trp Asn Cys Lys His Gln Gly Trp Gly Lys His Asn Cys Asp His Ala Glu Asp Ala Gly Xaa Ile 120 125 Cys Ser Lys Gly Xaa Asp Leu Thr 130 135 <210> 4333 <211> 59 <212> PRT <213> Homo sapiens <400> 4333 Ala Thr Ala His Gly Leu Thr Met Leu Ser Ile Pro Tyr Met Glu Arg 10 Cys Phe Pro Phe Gln Ser Ser Leu Lys Leu Cys Arg Arg Phe Thr Cys 25 Val Tyr Arg Ala Lys Arg Asn Gln Gly Met Glu Ile Glu Cys Val Ile

40

3951

Lys Ile Lys Leu Phe Met Leu Tyr Asn His Ala 50 55

<210> 4334

<211> 52

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4334

Lys Ala Cys Leu Leu His Cys Glu Gln Asp Ser Ser Pro Leu Asn His 1 5 10 15

Glu Tyr Val Ser Val Leu Trp Ile Thr Lys Leu Val Met Leu Leu Ser 20 25 30

Pro Asn Val Phe Phe Lys Lys Tyr Ser Phe Val His Leu Xaa Val Ile 35 40 45

Lys Leu Gln Asn 50

<210> 4335

<211> 42

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

~100× 1335

Tyr Glu Ser Leu Glu Met Tyr Gln Thr Glu Gly Xaa Phe Ser Leu Gln 1 5 10 15

Ile Met Ser Asn Val Ala Ile Leu Thr His Phe Ile Asn Ile Tyr Phe 20 25 30

Val Ile Gly Gly Glu His His Leu Leu Phe 35 40

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<210> 4336
<211> 51
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4336
Ala Leu Asn Ala Lys Leu Phe Tyr Thr Glu Lys Thr Leu Lys Xaa Val
                                    10
Leu Cys Gly Ile Thr Val Ile Cys His Glu Lys Pro Tyr Met Gly Asp
             20
                                 25
Met Leu Lys Trp Leu Leu Asn Glu Ile Arg Gln Gln Arg Lys Met Pro
                             40
Leu Lys Cys
     50
<210> 4337
<211> 62
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4337
Asp Tyr Ser Asp Phe Val Ser Phe Leu Leu Asn Phe Gly Gln Phe Cys
                                     10
Phe Cys Leu Cys His Leu Ser Phe Gln Met Tyr Trp His Glu Tyr Phe
                                25
             20
His Asn Ile Pro Xaa Leu Ser Phe Thr Phe Leu Gly Tyr Leu Ser Gly
         35
                     . 40
```

3953

Val Ser Leu Phe Ile Pro Lys Met Phe Ile His Ala Phe Xaa 50 55 60

<210> 4338

<211> 141

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (108)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4338

Asp Met Met Pro Leu Leu His Asn Tyr Val Thr Val Asp Thr Asp Thr 1 5 10 15

Leu Leu Ser Asp Thr Lys Tyr Leu Glu Met Ile Tyr Ser Met Cys Lys
20 25 30

Lys Val Leu Thr Gly Val Ala Gly Glu Asp Ala Glu Cys His Ala Ala 35 40 45

Lys Leu Glu Val Ile Ile Leu Gln Cys Lys Gly Arg Gly Ile Asp
50 55 60

Gln Cys Ile Pro Leu Phe Val Glu Ala Ala Leu Glu Arg Leu Thr Arg 65 70 75 80

Glu Val Lys Thr Ser Glu Leu Arg Thr Met Cys Leu Gln Val Ala Ile 85 90 95

Ala Ala Leu Tyr Tyr Asn Pro His Leu Leu Leu Xaa Thr Leu Glu Asn 100 105 110

Leu Arg Phe Pro Asn Asn Val Glu Pro Val Thr Asn His Phe Ile Thr
115 120 125

Gln Trp Leu Asn Asp Val Gly Leu Phe Leu Gly Ala Ser 130 135 140

<210> 4339

<211> 91

<212> PRT

<213> Homo sapiens

<400> 4339

3954

Leu Ala Ser Met Gly Ile Pro Gln Val Val Val Gln Pro Arg Ser Trp
1 5 10 15

Trp Leu Gly Leu Met Leu Leu Pro Ser Pro Ser Val Ser Cys Ser Gly
20 25 30

Ser Ala Tyr Val Pro Gly Val Trp Tyr Leu Ile Phe Gln Asp Ala Asp
35 40 45

Ile Tyr Phe Leu Pro Thr Thr Pro Tyr Thr Leu Ser Leu Ala Asn Ile 50 55 60

Phe Glu Cys Leu Leu Leu Val Cys Leu Ser Ser Val Val Leu Leu Leu 65 70 75 80

Cys Pro Lys Cys Met Leu Cys Ser Val Ser Ala 85 90

<210> 4340

<211> 68

<212> PRT

<213> Homo sapiens

<400> 4340

Ser Tyr Ser Tyr Ser His Glu Arg Gln Asn Val Cys Phe Lys Ile Asn 1 5 10 15

Leu Val Phe Cys Thr Phe Lys Phe Glu Lys Val Thr Thr Gly Ser Phe 20 25 30

Pro Val Phe Leu His Val Ser Phe Leu Ile Asp His Tyr Trp Gln Thr
35 40 45

Val Ser Val Asn Tyr Gln Met Cys Lys Ile Phe Cys Ile Ser Leu Cys 50 55 60

Leu Ile Cys Lys 65

<210> 4341

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4341

Gly Ala Ala Pro Pro Leu Ser Ser Glu His Lys Glu Pro Val Ala Gly
1 5 10 15

3955

Asp Ala Val Pro Gly Pro Lys Asp Gly Ser Ala Pro Glu Val Arg Gly 20 25 30

Ala Arg Asn Ser Glu Pro Gln Asp Glu Gly Glu Leu Phe Gln Gly Val 35 40 45

Asp Pro Arg Ala Leu Ala Ala Val Leu Leu Gln Ala Leu Asp Arg Pro 50 55 60

Ala Ser Pro Pro Ala Pro Ser Gly Ser Gln Gln Gly Pro Glu Glu Glu 65 70 75 80

Ala Ala Glu Ala Leu Leu Thr Glu Thr Val Arg Ser Gln Thr His Ser 85 90 95

Leu Pro Ala Pro Glu Ser Pro Glu Pro Ala Ser Ala Ser Pro Ser Asp 100 105 110

Ser Gly Glu Trp Ala Arg Gly Glu Arg Ser Leu Arg Gly 115 120 125

<210> 4342

<211> 50

<212> PRT

<213> Homo sapiens

<400> 4342

Phe Leu Leu Trp Gln Ile Leu Ser Ser Asn Leu Ser Phe Leu Val Glu
1 5 10 15

Gln Ala Leu Phe Phe Glu Pro Ser Asn Asp Leu Glu Ala Asp Val Ile 20 25 30

Ser Val Pro Phe Ala Ile Cys Cys Val Gly Phe Phe Phe Lys Ala
35 40 45

Thr Gln 50

<210> 4343

<211> 273

<212> PRT

<213> Homo sapiens

<400> 4343

Asp Pro Arg Val Arg Glu Asp Pro Gln Pro Gly Pro Lys Pro Val Pro

1				5					10					15	
Glu	Pro	Glu	Pro 20	Glu	Pro	Glu	Pro	Ser 25	Arg	Glu	Pro	Val	Ala 30	Gly	Ala
Pro	Gly	Cys 35	Gly	Thr	Ala	Gly	Pro 40	Pro	Ala	Met	Ala	Thr 45	Leu	Trp	Gly
Gly	Leu 50	Leu	Arg	Leu	Gly	Ser 55	Leu	Leu	Ser	Leu	Ser 60	Cys	Leu	Ala	Leu
Ser 65	Val	Leu	Leu	Leu	Ala 70	His	Cys	Gln	Thr	Pro 75	Pro	Arg	Ile	Ser	Arg 80
Met	Ser	Asp	Val	Asn 85	Val	Ser	Ala	Leu	Pro 90	Ile	Lys	Lys	Asn	Ser 95	Gly
His	Ile	Tyr	Asn 100	Lys	Asn	Ile	Ser	Gln 105	Lys	Asp	Суз	Asp	Cys 110	Leu	His
Val	Val	Glu 115	Pro	Met	Pro	Val	Arg 120	Gly	Pro	Asp	Val	Glu 125	Ala	Tyr	Cys
Leu	Arg 130	Суѕ	Glu	Cys	Lys	Tyr 135	Glu	Glu	Arg	Ser	Ser 140	Val	Thr	Ile	Lys
Val 145	Thr	Ile	Ile	Ile	Туг 150	Leu	Ser	Ile	Leu	Gly 155	Leu	Leu	Leu	Leu	Tyr 160
Met	Val	Tyr	Leu	Thr 165	Leu	Val	Glu	Pro	Ile 170	Leu	Lys	Arg	Arg	Leu 175	Phe
Gly	His	Ala	Gln 180	Leu	Ile	Gln	Ser	Asp 185	Asp	Asp	Ile	Gly	Asp 190	His	Gļn
Pro	Phe	Ala 195	Asn	Ala	His	Asp	Val 200		Ala	Arg	Ser	Arg 205	Ser	Arg	Ala
Asn	Val 210	Leu	Asn	Lys	Val	Glu 215	Tyr	Gly	Thr	Ala	Ala 220	Leu	Glu	Ala	Ser
Ser 225	Pro	Arg	Ala	Ala	Lys 230	Ser	Leu	Ser	Leu	Thr 235	Gly	Met	Leu	Ser	Ser 240
Ala	Asn	Trp	Gly	Ile 245	Glu	Phe	Lys	Val	Thr 250	Arg	Lys	Lys	Gln	Ala 255	Asp
Asn	Trp	Lys	Gly 260	Thr	Asp	Trp	Val	Leu 265	Leu	Gly	Phe	Ile	Leu 270	Ile	Pro
Cys														•	

3957

<210> 4344 <211> 72 <212> PRT <213> Homo sapiens <400> 4344 Val Met Ala Pro Lys Asp Val Leu Phe Ile Leu Ile Pro Gly Thr Cys Lys His Val Thr Leu Tyr Gly Lys Arg Asp Phe Gly Gln Ala Pro Val 25 20 Ile Pro Asp Thr Gln Glu Ala Glu Ala Lys Glu Ser Leu Lys Pro Gly Arg Arg Arg Leu Gln Gly Ala Lys Ile Val Pro Met His Ser Ser Leu Ser Asn Lys Val Arg Leu Cys Leu 70 65 <210> 4345 <211> 94 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4345 Arg Trp Arg Asp Thr Leu Thr Gln Leu Ser Leu Ser Tyr Tyr Ala Thr 5 10 Asp Gln Gly Lys Arg Trp Asp Asp Arg Trp Gly Gln Thr Glu Arg Ala 20 Ser Gly Lys Gln Ala Tyr Ile Val Phe Phe Lys Met His Lys Ala Ser Gln Leu Arg Xaa His Leu Val Trp Ala Ser Leu Gly Leu Glu Thr Leu 55

Leu Glu Phe Phe Leu Gly Thr Trp Arg Val Asp Asp Ile Gln Ala Leu

3958

65 70 75 80

Lys His Ser Gln Arg Ser Pro Glu Gly Ala Thr Phe Ser Arg
85 90

<210> 4346

<211> 92

<212> PRT

<213> Homo sapiens

<400> 4346

Arg Glu Gln Ile Lys Arg Val Lys Asp Ser Glu Asp Val Pro Met Val 1 5 . 10 15

Leu Val Gly Asn Lys Cys Asp Leu Pro Ser Arg Thr Val Asp Thr Lys
20 25 30

Gln Ala Gln Asp Leu Ala Arg Ser Tyr Gly Ile Pro Phe Ile Glu Thr 35 40 45

Ser Ala Lys Thr Arg Gln Gly Val Asp Asp Ala Phe Tyr Thr Leu Val 50 55 60

Arg Glu Ile Arg Lys His Lys Glu Lys Met Ser Lys Asp Gly Lys Lys 65 70 75 80

Lys Lys Lys Ser Lys Thr Lys Cys Val Ile Met $$85\,$

<210> 4347

<211> 66

<212> PRT

<213> Homo sapiens

<400> 4347

Pro Ala Ser Glu Val Leu Met Asp Asp Leu Gln Lys Ser Val Asp 1 5 10 15

Met Ile Met Asp Met Phe Cys Pro Pro Gly Ile Lys Ile Asp Ala Tyr
20 25 30

Pro Trp Leu Glu Cys Phe Ile Lys Ser Tyr Asn Val Thr Asn Gly Thr 35 40 45

Asp Asn Gln Ile Cys Tyr Gln Ile Phe Asp Thr Thr Val Ala Glu Asp 50 55 60

3959

Val Ile 65

<210> 4348

<211> 51

<212> PRT

<213> Homo sapiens

<400> 4348

Leu Arg Cys His Lys Lys Gln His Ser Asp Gln Ser Glu Asn Lys Asn 1 5 10 15

Ser Asp Leu Val Thr Phe Pro Pro Glu Ser Gly Ala Ser Gly Gln Leu 20 25 30

Ser Thr Leu Val Ser Val Gly Gln Leu Glu Ala Pro Leu Glu Pro Ser 35 40 45

Gln Asp Leu 50

<210> 4349

<211> 69

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (40)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (64)

<223> Xaa equals any of the naturally occurring L-amino acids

~100<u>~ 1310</u>

Lys Ile Ala Glu Leu Glu Phe Ser Pro Val Phe His Phe Thr Leu Pro 1 5 10 15

Val Ser His Ala Gln Asn Thr Arg Gly Ser Ala Gly Ser Gln Ser Thr 20 25 30

Asp Glu Asn Pro Asn Leu Ser Xaa Phe Leu Gly Ser Ser Lys Trp Trp 35 40 45

Ser Arg Met Val Gly Asp Leu Ile Ser Tyr Tyr Leu Pro Gly Glu Xaa

3960

50 55 60 Phe Leu Pro Gly Lys 65 <210> 4350 <211> 313 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (297) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (310) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4350 Gly Gly Arg Gly Arg Glu Gly Arg Pro Glu Arg Gly Cys Cys Glu Gly Arg Gly Pro Val Thr Gly Arg Glu Ala Ala Gly Gly Gly Gly 25 Gly Thr Ser Thr Thr Met Ser Arg Ser Val Leu Gln Pro Ser Gln Gln 35 40 45 Lys Leu Ala Glu Lys Leu Thr Ile Leu Asn Asp Arg Gly Val Gly Met 55 Leu Thr Arg Leu Tyr Asn Ile Lys Lys Ala Cys Gly Asp Pro Lys Ala 70 Lys Pro Ser Tyr Leu Ile Asp Lys Asn Leu Glu Ser Ala Val Lys Phe 85 90 Ile Val Arg Lys Phe Pro Ala Val Glu Thr Arg Asn Asn Asn Gln Gln 100 105 Leu Ala Gln Leu Gln Lys Glu Lys Ser Glu Ile Leu Lys Asn Leu Ala 115 120 125 Leu Tyr Tyr Phe Thr Phe Val Asp Val Met Glu Phe Lys Asp His Val 135 140

Cys Glu Leu Leu Asn Thr Ile Asp Val Cys Gln Val Phe Phe Asp Ile

3961

145 150 155 160 Thr Val Asn Phe Asp Leu Thr Lys Asn Tyr Leu Asp Leu Ile Ile Thr 165 170 Tyr Thr Thr Leu Met Ile Leu Leu Ser Arg Ile Glu Glu Arg Lys Ala 185 Ile Ile Gly Leu Tyr Asn Tyr Ala His Glu Met Thr His Gly Ala Ser 195 200 Asp Arg Glu Tyr Pro Arg Leu Gly Gln Met Ile Val Asp Tyr Glu Asn Pro Leu Lys Lys Met Met Glu Glu Phe Val Pro His Ser Lys Ser Leu 235 230 Ser Asp Ala Leu Ile Ser Leu Gln Met Val Tyr Pro Arg Asn Leu 245 250 Ser Ala Asp Gln Trp Arg Asn Ala Gln Leu Leu Ser Leu Ile Ser Ala 260 265 Pro Ser Thr Met Leu Asn Pro Ala Gln Ser Asp Thr Met Pro Cys Glu 275 280 Tyr Leu Ser Leu Gly Cys Asn Gly Xaa Ile Gly Leu Ser Leu Ala Leu 295 300 Phe Val Pro Trp Gly Xaa Leu Asn Thr 305 310 <210> 4351 <211> 57 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (53) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4351 Gly Arg Gly Ser Val Ile Ser Trp Ile Ser Gly His Ile Cys Tyr Ser 10 Thr Asp His Gly Thr Leu Gly Glu Glu Arg Cys Phe Pro Ser Thr His 20 25

3962

Leu Met Phe Ile Gly Trp Gly Ser Trp Asn Arg Arg Gln Ile Ser Lys 40 Glu Lys Gly Thr Xaa Ile Tyr Val Ile 50 <210> 4352 <211> 70 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4352 Val Ile Pro Ile Tyr Ile Xaa Xaa Cys Phe Thr Gly Leu Ile Ser Thr 5 Ser Ser Thr Pro Pro Met Asn Ser Ser Asn Thr Ser Ile Ile Val Cys 20 Ser Ser Ala Glu Ile Arg Ala Leu Phe Tyr Trp Leu Gly Cys Arg Phe 45 Leu Phe Tyr Phe Leu Lys Arg Leu Ile Ser Tyr Arg Lys Gly Phe Phe 55 60 Leu Tyr Pro Val Phe Thr 65 <210> 4353 <211> 93 <212> PRT <213> Homo sapiens <400> 4353

Gly Thr Arg Glu Ser Asp Gly Glu Lys Lys Tyr Pro Cys Pro Glu Cys

Gly Ser Phe Phe Arg Ser Lys Ser Tyr Leu Asn Lys His Ile Gln Lys

3963

20 25 30

Val His Val Arg Ala Leu Gly Gly Pro Leu Gly Asp Leu Gly Pro Ala 35 40 45

Leu Gly Ser Pro Phe Ser Pro Gln Gln Asn Met Ser Leu Leu Glu Ser 50 55 60

Phe Gly Phe Gln Ile Val Gln Ser Ala Phe Ala Ser Ser Leu Val Asp 65 70 75 80

Pro Glu Val Asp Gln Gln Pro Met Gly Pro Glu Gly Lys 85 90

<210> 4354

<211> 70

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4354

Ser His Gln Ile Phe Met Phe Lys Lys Ile Ser Leu Trp Ile Glu Ser 1 5 10 15

Ser Pro Ala Leu Arg Glu Lys Glu Gly Pro Tyr Gly Arg Leu Xaa Ser 20 25 30

His Tyr Tyr Cys Leu Tyr Pro Ala Val Leu Met Lys Pro Pro Thr Leu $35 \hspace{1cm} 40 \hspace{1cm} 45$

Ser His Ser Arg Asn His Lys Thr Gln Ala Val Leu Asp Ser Gly Gly 50 55 60

Leu Pro Gly Lys Ile Arg 65 70

<210> 4355

<211> 92

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

3964

<222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (75) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (80) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4355 Phe Ser Xaa Pro Val Gln Arg Leu Xaa Cys Arg Arg His Pro Leu Ala 10 Ala Cys Ser Ser Ala Ala Pro Phe Ala Ala Val Pro Cys Ala Pro Glu 20 25 30 Asn Glu Asn Pro Ala Phe Ala Thr Asn His Ala Pro Val Asn Ala Lys 35 40 Pro His Ala Leu Cys Pro Glu Arg Lys Pro Leu Thr Ser Lys Glu Asn 55 Val Leu Met His Ser Ser Ile Leu Ala Pro Xaa Arg Glu Ser Trp Xaa 70 75 Thr Ala Gly Glu Gly Glu Asn Trp Lys Lys Lys 85 <210> 4356 <211> 140 <212> PRT <213> Homo sapiens <400> 4356 Glu Cys Trp Ser Glu Arg Ser Leu Lys Pro Gly Arg Gly Ala Asp Pro 5 10 Leu Cys Ser Ala Pro Thr Leu Cys Gln Gly Gly Leu Ala Thr Thr Val 20 25

3965

Phe Phe Leu Leu Phe Ile Cys Ser Trp Ile Phe Leu Lys Pro Phe His 35 40 45

His Gln Pro Ser Ser Ser Leu Pro Ala Pro Trp Arg Leu Lys Leu Phe 50 55 60

Pro Ala Tyr Val Arg Glu Gly Glu Pro Glu Thr Ala Thr Ser Gly Val 65 70 75 80

Lys Gly Val Ser Ser Glu Pro Arg Thr Met Ala Phe Cys His Cys Leu 85 90 95

Leu Ser Ser Cys Cys Trp Gly Leu Gly Leu Leu Ala Ala Ser Phe
100 105 110

Ser Ala Asn Gln Glu Ser Arg Glu Val Gly Thr Ala Ser Thr Lys Thr 115 120 125

Leu Lys Met Ser Gly Glu Asp Arg Leu Ser Pro Gly 130 135 140

<210> 4357

<211> 58

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4357

Leu Gly Leu Gly Gln Cys Leu Trp Pro Xaa Phe Ser His Ser Tyr Xaa 1 5 10 15

Ala Glu Cys Ser Lys Ser Val Gln Ile Arg Glu Thr Thr Arg Cys Asn 20 25 30

Gln Ser Ser Cys Ser Leu Pro Tyr Phe Gln Ile Leu Tyr Val Ile Ser

3966

35 40 45

His Phe Xaa Ser Ile Asn Leu Leu Pro Pro 50 55

<210> 4358

<211> 178

<212> PRT

<213> Homo sapiens

<400> 4358

Ala Leu Arg Leu Arg Glu Asp Asp Arg Gly Gly Thr Met Leu Leu 1 5 10 15

Pro Asn Ile Leu Leu Thr Gly Thr Pro Gly Val Gly Lys Thr Thr Leu 20 25 30

Gly Lys Glu Leu Ala Ser Lys Ser Gly Leu Lys Tyr Ile Asn Val Gly 35 40 45

Asp Leu Ala Arg Glu Glu Gln Leu Tyr Asp Gly Tyr Asp Glu Glu Tyr 50 55 60

Asp Cys Pro Ile Leu Asp Glu Asp Arg Val Val Asp Glu Leu Asp Asn 65 70 75 80

Gln Met Arg Glu Gly Gly Val Ile Val Asp Tyr His Gly Cys Asp Phe 85 90 95

Phe Pro Glu Arg Trp Phe His Ile Val Phe Val Leu Arg Thr Asp Thr 100 105 110

Asn Val Leu Tyr Glu Arg Leu Glu Thr Arg Gly Tyr Asn Glu Lys Lys 115 120 125

Leu Thr Asp Asn Ile Gln Cys Glu Ile Phe Gln Val Leu Tyr Glu Glu
130 135 140

Lys Pro Glu Glu Leu Glu Asn Asn Val Asp Gln Ile Leu Lys Trp Ile 165 170 175

Glu Gln

3967

<210> 4360 <211> 57 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4360 Asn Ile Asn Pro Asn Ser Pro Phe His Phe Ser Leu Arg His Glu Ser 10 Tyr Lys Thr Gln Tyr Arg Ala Met Phe Val Met Asn Cys Ser Ile Asn 20 25 30 Lys Glu Glu Val Leu Arg Xaa Lys Ala Ser Glu Glu Glu Gly Lys 40 Gly Gly Ser Ile Arg Lys Met Arg Ser

55

<210> 4361 <211> 41

50

<212> PRT

<213> Homo sapiens

3968

<220> <221> SITE <222> (31) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4361 Asn Gly Phe Glu Thr Ile Gly Thr Asp Lys Ser Gln Ile Gly Gly Ser Leu Ile Leu Asn Trp Pro Cys His Gln Cys Leu Phe Leu Arg Xaa Phe 25 Gly Gly Cys His Val Tyr His Phe Phe 35 <210> 4362 <211> 391 <212> PRT <213> Homo sapiens <400> 4362 Thr Trp Val Pro Thr Thr Ile Leu Asp Leu His Gly Ile Leu Asp His 5 10 Val Lys Lys Gln Pro Pro Lys Ser Leu Arg Ser Met Glu Leu Glu Cys 20 Ala Val Leu Gly Arg Lys Leu Glu Thr Trp Asp Lys His Glu Glu Leu Glu Glu Leu Val Ala Arg Phe Leu Gly Val Glu Ala Ala Met Ala Tyr 55 Gly Met Gly Phe Ala Thr Asn Ser Met Asn Ile Pro Ala Leu Val Gly 65 70 Lys Gly Cys Leu Ile Leu Ser Asp Glu Leu Asn His Ala Ser Leu Val 85 90 Leu Gly Ala Arg Leu Ser Gly Ala Thr Ile Arg Ile Phe Lys His Asn 105 Asn Met Gln Ser Leu Glu Lys Leu Leu Lys Asp Ala Ile Val Tyr Gly 120 125

Gln Pro Arg Thr Arg Pro Trp Lys Lys Ile Leu Ile Leu Val Glu

140

135

3969

Gly 145	Ile	Tyr	Ser	Met	Glu 150	Gly	Ser	Ile	Val	Arg 155	Leu	Pro	Glu	Val	Ile 160
Ala	Leu	Lys	Lys	Lys 165	Tyr	Lys	Ala	Tyr	Leu 170	Tyr	Leu	Asp	Glu	Ala 175	His
Ser	Ile	Gly	Ala 180	Leu	Gly	Pro	Thr	Gly 185	Arg	Gly	Val	Val	Glu 190	Tyr	Phe
Gly	Leu	Asp 195	Pro	Glu	Asp	Val	Asp 200	Val	Met	Met	Gly	Thr 205	Phe	Thr	Lys
Ser	Phe 210	Gly	Ala	Ser	Gly	Gly 215	Tyr	Ile	Gly	Gly	Lys 220	Lys	Glu	Leu	Ile
Asp 225	Tyr	Leu	Arg	Thr	His 230	Ser	His	Ser	Ala	Val 235	Tyr	Ala	Thr	Ser	Leu 240
Ser	Pro	Pro	Val	Val 245	Glu	Gln	Ile	Ile	Thr 250	Ser	Met	Lys	Cys	Ile 255	Met
Gly	Gln	Asp	Gly 260	Thr	Ser	Leu	Gly	Lys 265	Glu	Cys	Val	Gln	Gln 270	Leu	Ala
Glu	Asn	Thr 275	Arg	Tyr	Phe	Arg	Arg 280	Arg	Leu	Lys	Glu	Met 285	Gly	Phe	Ile
Ile	Туг 290	Gly	Asn	Glu	Asp	Ser 295	Pro	Val	Val	Pro	Leu 300	Met	Leu	Tyr	Met
Pro 305	Ala	Lys	Ile	Gly	Ala 310	Phe	Gly	Arg	Glu	Met 315	Leu	Lys	Arg	Asn	Ile 320
Gly	Val	Val	Val	Val 325	Gly	Phe	Pro	Ala	Thr 330	Pro	Ile	Ile	Glu	Ser 335	Arg
Ala	Arg	Phe	Cys 340	Leu	Ser	Ala	Ala	His 345	Thr	Lys	Glu	Ile	Leu 350	Asp	Thr
Ala	Leu	Lys 355	Glu	Ile	Asp	Glu	Val 360	Gly	Asp	Leu	Leu	Gln 365	Leu	Lys	Tyr
Ser	Arg 370	His	Arg	Leu	Val	Pro 375	Leu	Leu	Asp	Arg	Pro 380	Phe	Asp	Glu	Thr
Thr 385	Tyr	Glu	Glu	Thr	Glu 390	Asp									

<210> 4363

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<211> 62
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
Ser Gly Val Val Thr Ala Cys Glu Gly Thr Glu Leu Ser Ala Gly Ser
Arg Asp His Gly His Lys Ala Leu Thr Leu Thr Arg Pro Gln Gln Ala
                                 25
Leu Xaa Glu Gly Gln Pro Pro Leu Leu Leu Ser Leu Thr Val
                             40
Ala Val Asp Leu Arg Xaa Tyr Ile Leu Arg Xaa His Ser Leu
     50
                         55
<210> 4364
<211> 225
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (143)
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<220>
<221> SITE
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3971

<222> (176)															
<223	3> Xa	aa eç	guals	any	of	the	natu	rall	y oc	curr	ing	L-am	nino	acid	ls
)> 43		_	~1		0 3	~ 1	3		a 3	m1	a 1	G	Q3	D
GIY 1	Thr	Arg	ser	5	ser	GIU	GIU	Asp	10	GIU	THE	GIU	ser	Gly 15	PIO
Pro	Val	Glu	Arg 20	Cys	Gly	Val	Leu	Ser 25	Lys	Trp	Thr	Asn	Tyr 30	Ile	His
Gly	Trp	Gln 35	Asp	Arg	Trp	Val	Val 40	Leu	Lys	Asn	Asn	Ala 45	Leu	Ser	Tyr
Tyr	Lys 50	Ser	Glu	Asp	Glu	Thr 55	Glu	Tyr	Gly	Cys	Arg 60	Gly	Ser	Ile	Cys
Leu 65	Ser	Lys	Ala	Val	Ile 70	Thr	Pro	His	Asp	Phe 75	Xaa	Glu	Суз	Arg	Phe 80
Asp	Ile	Ser	Val	Asn 85	Asp	Ser	Val	Trp	Tyr 90	Leu	Arg	Ala	Gln	Asp 95	Pro
Asp	His	Arg	Gln 100	Gln	Trp	Ile	Asp	Ala 105	Ile	Glu	Gln	His	Lys 110	Thr	Glu
Ser	Gly	Tyr 115	Gly	Ser	Glu	Ser	Ser 120	Leu	Arg	Arg	His	Gly 125	Ser	Met	Val
Ser	Leu 130	Val	Ser	Gly	Ala	Ser 135	Gly	Tyr	Ser	Glu	Thr 140	Ser	Thr	Xaa	Ser
Phe 145	Lys	Lys	Gly	His	Ser 150	Leu	Arg	Glu	Lys	Leu 155	Ala	Glu	Met	Glu	Thr 160
Phe	Arg	Asp	Ile	Leu 165	Cys	Arg	Gln	Val	Asp 170	Thr	Leu	Gln	Lys	Tyr 175	Xaa
Asp	Ala	Cys	Ala 180	Asp	Ala	Val	Ser	Lys 185	Asp	Glu	Leu	Gln	Arg 190	Asp	Lys
Val	Val	Glu 195	Asp	Asp	Glu	Asp	Asp 200	Phe	Pro	Thr	Thr	Arg 205	Ser	Asp	Gly
Asp	Phe 210	Leu	His	Ser	Thr	Asn 215	Gly	Asn	Lys	Glu	Lys 220	Leu	Phe	Pro	His

215

Val 225

PCT/US00/26524 WO 01/22920

45

3972 <210> 4365 <211> 114 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4365 Ile Ala Ser Ala Xaa Phe Tyr Ala Arg Leu Asn Tyr Glu Pro Val Arg 10 Pro Gly Gly Gly Ser Gly Gly His Ser Ala Arg Cys Arg Arg Glu Arg Gly Ala Ala Ala Ala His Gly Ala Pro Ser Ala Ser Phe Pro 40 Pro Pro Val Pro Asn Pro Phe Val Gln Gln Thr Gln Ile Gly Ser Ala 50 55 Arg Arg Val Gln Ile Val Leu Leu Gly Ile Ile Leu Leu Pro Ile Arg 65 75 Val Leu Leu Val Ala Leu Ile Tyr Tyr Leu His Gly His Cys Cys Ile 90 105 100

Ser Thr Val Cys Cys Pro Glu Lys Leu Thr His Pro Ile Thr Gly Trp 110

Arg Arg

<210> 4366 <211> 56 <212> PRT <213> Homo sapiens

<400> 4366

Val Gly Met Val Ser His Ser Ser Arg Cys Arg Phe Gly Leu Leu Gly 10 15

Thr Ile Trp Leu Asp Pro Glu Ser Ala Trp Asn Arg Asp Arg Asp Leu 20

Ser Gly Pro Ala Ala Gly Ser Ser Leu Val Val Ala Val Val Arg Gly 40 45

3973

Leu Arg Trp Leu Pro Gly Leu Val 50 55

<210> 4367

<211> 389

<212> PRT

<213> Homo sapiens

<400> 4367

Gly Thr Ser Ser Ser Ser Ser Gln Leu Ala Pro Asn Gly Ala Lys
1 5 10 15

Cys Ile Pro Val Arg Asp Arg Gly Phe Leu Val Gln Thr Ile Glu Phe 20 25 30

Ala Glu Gln Arg Ile Pro Val Leu Asn Glu Tyr Cys Val Val Cys Asp 35 40 45

Glu Pro His Val Phe Gln Asn Gly Pro Met Leu Arg Pro Thr Val Cys
50 55 60

Glu Arg Glu Leu Cys Val Phe Ala Phe Gln Thr Leu Gly Val Met Asn 65 70 75 80

Glu Ala Ala Asp Glu Ile Ala Thr Gly Ala Gln Val Val Asp Leu Leu 85 90 95

Val Ser Met Cys Arg Ser Ala Leu Glu Ser Pro Arg Lys Val Val Ile 100 105 110

Phe Glu Pro Tyr Pro Ser Val Val Asp Pro Asn Asp Pro Gln Met Leu 115 120 125

Ala Phe Asn Pro Arg Lys Lys Asn Tyr Asp Arg Val Met Lys Ala Leu 130 135 140

Asp Ser Ile Thr Ser Ile Arg Glu Met Thr Gln Ala Pro Tyr Leu Glu 145 150 155 160

Ile Lys Lys Gln Met Asp Lys Gln Asp Pro Leu Ala His Pro Leu Leu 165 170 175

Gln Trp Val Ile Ser Ser Asn Arg Ser His Ile Val Lys Leu Pro Val 180 185 190

Asn Arg Gln Leu Lys Phe Met His Thr Pro His Gln Phe Leu Leu 195 200 205

3974

Ser Ser Pro Pro Ala Lys Glu Ser Asn Phe Arg Ala Ala Lys Lys Leu 210 215 220

Phe Gly Ser Thr Phe Ala Phe His Gly Ser His Ile Glu Asn Trp His 225 230 235 240

Ser Ile Leu Arg Asn Gly Leu Val Val Ala Ser Asn Thr Arg Leu Gln 245 250 255

Leu His Gly Ala Met Tyr Gly Ser Gly Ile Tyr Leu Ser Pro Met Ser 260 265 270

Ser Ile Ser Phe Gly Tyr Ser Gly Met Asn Lys Lys Gln Lys Val Ser 275 280 285

Ala Lys Asp Glu Pro Ala Ser Ser Ser Lys Ser Ser Asn Thr Ser Gln 290 295 300

Ser Gln Lys Lys Gly Gln Gln Ser Gln Phe Leu Gln Ser Arg Asn Leu 305 310 315 320

Lys Cys Ile Ala Leu Cys Glu Val Ile Thr Ser Ser Asp Leu His Lys 325 330 335

His Gly Glu Ile Trp Val Val Pro Asn Thr Asp His Val Cys Thr Arg
340 345 350

Phe Phe Val Tyr Glu Asp Gly Gln Val Gly Asp Ala Asn Ile Asn 355 360 365

Thr Gln Glu Gly Gly Ile His Lys Glu Ile Leu Arg Val Ile Gly Asn 370 380

Gln Thr Ala Thr Gly 385

<210> 4368

<211> 195

<212> PRT

<213> Homo sapiens

<400> 4368

Thr Ser Leu Gln Leu Met Met Ser Ser Phe Ser Gln Gly Val Gln Arg
1 5 10 15

Gln Glu Val Val Cys Lys Arg Leu Asp Asp Asn Ser Ile Val Gln Asn
20 25 30

Asn Tyr Cys Asp Pro Asp Ser Lys Pro Pro Glu Asn Gln Arg Ala Cys

3975

45 35 40 Asn Thr Glu Pro Cys Pro Pro Glu Trp Phe Ile Gly Asp Trp Leu Glu 55 Cys Ser Lys Thr Cys Asp Gly Gly Met Arg Thr Arg Ala Val Leu Cys 75 Ile Arg Lys Ile Gly Pro Ser Glu Glu Glu Thr Leu Asp Tyr Ser Gly 90 85 95 Cys Leu Thr His Arg Pro Val Glu Lys Glu Pro Cys Asn Asn Gln Ser 100 105 Cys Pro Pro Gln Trp Val Ala Leu Asp Trp Ser Glu Cys Thr Pro Lys Cys Gly Pro Gly Phe Lys His Arg Ile Val Leu Cys Lys Ser Ser Asp 140 130 135 Leu Ser Lys Thr Phe Pro Ala Ala Gln Cys Pro Glu Glu Ser Lys Pro 145 150 155 Pro Val Arg Ile Arg Cys Ser Leu Gly Arg Cys Pro Pro Arg Trp 170 165 Val Thr Gly Asp Trp Gly Gln Cys Ser Ala Gln Cys Gly Leu Gly Gln 190 185 His Leu Gly 195 <210> 4369 <211> 92 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (8) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE

3976

<222> (18)

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<400> 4369

Ala Gln Gly Phe Arg His Glu Xaa Xaa Leu Leu Val Gly Gly Leu Leu 1 5 10 15

Ala Xaa Asp Gly Asp Cys Pro Gly Val Val Thr Met Phe Leu Ser Ala 20 25 30

Val Phe Phe Ala Lys Ser Lys Ser Lys Asn Ile Leu Val Arg Met Val 35 40 45

Ser Glu Ala Gly Thr Gly Phe Cys Phe Asn Thr Lys Arg Asn Arg Leu 50 55 60

Arg Glu Lys Leu Thr Leu Leu His Tyr Asp Pro Val Val Lys Gln Arg 65 70 75 80

Val Leu Phe Val Glu Lys Lys Lys Ile Arg Ser Leu 85 90

<210> 4370

<211> 63

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4370

Arg Phe Gln Phe Pro Val Cys His Arg Trp Pro Pro Ile Phe Gln Lys
1 5 10 15

Ser Leu Ala Pro Leu Phe Leu Phe Leu His Pro Ser Pro Gln Arg Ser 20 25 30

Leu Thr Arg Xaa Lys Gln Glu Asp Ser Val Ile Tyr Lys Arg His Phe 35 40 45

Ser Phe Thr Arg Thr Glu Asn Ser Thr Gln His Tyr Arg Asn Ser 50 55 60

<210> 4371

<211> 91

3977

<212> PRT

<213> Homo sapiens

<400> 4371

Asp Val Cys Phe Asn Leu Ile Phe Leu Arg Asp Gly Gly His His Val 1 5 10 15

Glu Thr Arg Lys Trp Gly Lys Cys Glu Leu Ser Arg Gln Arg Phe Ile 20 25 30

Leu Cys Leu Tyr Leu Phe Leu Ile Gly Leu Ile Ser Asn Val Leu Asn 35 40 45

Ser Ser Ile Pro Gly Leu Gly Val Cys Asn Gly Tyr Gln Lys Thr Asn 50 55 60

Lys Lys Arg Lys Lys Glu Lys Lys Glu Asn Asn Cys Asp Met 65 70 75 80

Leu Leu Ser Leu Leu Tyr Phe Ser Asn Met 85 90

<210> 4372

<211> 64

<212> PRT

<213> Homo sapiens

<400> 4372

Lys Leu Ser Glu Gly Tyr Tyr Leu Tyr Leu Met Lys Glu Asn Pro Asn 1 5 10 15

Lys Ala His Leu Glu Ile Asp Ile Leu Leu Tyr Met Cys Tyr Arg Tyr 20 25 30

Thr Tyr Ile Val Gln Ile Asp Met Cys Asp Ala Tyr Ile Gln Cys Tyr 35 40 45

Ile Cys Val Tyr Val Cys Ile His Thr Glu Ser Val Ile Cys Ile His 50 55 60

<210> 4373

<211> 255

<212> PRT

<213> Homo sapiens

<400)> 43	373													
Glu 1	Arg	Arg	Val	Arg 5	Arg	Val	His	Glu	Glu 10	Val	Arg	Val	Lys	Ile 15	Lys
Asp	Leu	Asn	Glu 20	His	Ile	Val	Cys	Cys 25	Leu	Суѕ	Ala	Gly	Tyr 30	Phe	Val
Asp	Ala	Thr 35	Thr	Ile	Thr	Glu	Суs 40	Leu	His	Thr	Phe	Cys 45	Lys	Ser	Суз
Ile	Val 50	Lys	Tyr	Leu	Gln	Thr 55	Ser	Lys	Tyr	Cys	Pro 60	Met	Cys	Asn	Ile
Lys 65	Ile	His	Glu	Thr	Gln 70	Pro	Leu	Leu	Asn	Leu 75	Lys	Leu	Asp	Arg	Val 80
Met	Gln	Asp	Ile	Val 85	Tyr	Lys	Leu	Val	Pro 90	Gly	Leu	Gln	Asp	Ser 95	Glu
Glu	Lys	Arg	Ile 100	Arg	Glu	Phe	Tyr	Gln 105	Ser	Arg	Gly	Leu	Asp 110	Arg	Val
Thr	Gln	Pro 115	Thr	Gly	Glu	Glu	Pro 120	Ala	Leu	Ser	Asn	Leu 125	Gly	Leu	Pro
Phe	Ser 130	Ser	Phe	Asp	His	Ser 135	Lys	Ala	His	Tyr	Tyr 140	Arg	Tyr	Asp	Glu
Gln 145	Leu	Asn	Leu	Cys	Leu 150	Glu	Arg	Leu	Ser	Ser 155	Gly	Lys	Asp	Lys	Asn 160
Lys	Ser	Val	Leu	Gln 165	Asn	Lys	Tyr	Val	Arg 170	Cys	Ser	Val	Arg	Ala 175	Glu
Val	Arg	His	Leu 180	Arg	Arg	Val	Leu	Cys 185	His	Arg	Leu	Met	Leu 190	Asn	Pro
Gln	His	Val 195	Gln	Leu	Leu	Phe	Asp 200	Asn	Glu	Val	Leu	Pro 205	Asp	His	Met
Thr	Met 210	Lys	Gln	Ile	Trp	Leu 215	Ser	Arg	Trp	Phe	Gly 220	Lys	Pro	Ser	Pro
Leu 225	Leu	Leu	Gln	Tyr	Ser 230	Val	Lys	Glu	Lys	Arg 235	Arg	Leu	Ala	Lys	Pro 240
Pro	Pro	His	Pro	Thr 245	Pro	Leu	Pro	Ser	Pro 250	Asp	Ile	Tyr	Val	Lys 255	

3979

<210> 4374 <211> 34 <212> PRT

<213> Homo sapiens

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3980

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<213> Homo sapiens
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<220>
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<400> 4376
Arg Val Phe Gln Ala Trp Leu Phe Thr Xaa Ser Phe Arg Gly Thr Leu
        5
                                     10
                                                         15
Lys Pro Trp Arg His Leu Ala Leu Glu Pro Trp Arg Phe Pro Cys His
             20
Ser Pro Cys Trp Asp Lys Ala Arg Ala Trp His Pro Gly Met Met Phe
Pro Ala Ala Glu Cys Ala His Asn Leu Ser Ser Ser Cys Val Arg Gln
                         55
Leu His Met Leu Ala Ser Asn Xaa Pro Xaa Gln Pro Ser Gln Tyr Tyr
 65
                    70
                                         75
Cys Phe Ser Ser Tyr Arg Trp Gly Asp Asp Ile
                 85
                                     90
<210> 4377
<211> 86
<212> PRT
<213> Homo sapiens
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<221> SITE

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<400> 4377
Lys Glu Asn Glu Lys Glu Ser Pro Arg Gln Arg Arg Gly Lys Glu Asn
                                     10
Lys Leu Arg His Ser Xaa Phe Ser Phe Leu Thr Leu Cys Leu Glu His
             20
                                 25
                                                      30
His Thr Ala His Lys Leu Phe Pro Asn Ala Gln Leu Ala Pro Lys Val
                             40
         35
Gly Ala Trp His Gly Xaa Gly Ala His Lys Thr Leu Thr Lys Leu Xaa
Ala Gly Met Gly Glu Xaa Leu Leu Val His Ser Ser Tyr Pro Leu Pro
                                                              80
                     70
                                          75
Pro Asn Pro Leu Leu Ala
                 85
<210> 4378
<211> 196
<212> PRT
<213> Homo sapiens
<220>
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<222> (118)
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<400> 4378
Glu Lys Val Ser Leu Ser Ser Pro Ser Pro Ala Thr Leu Ala Met Asp
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3982

1 15 10 Gln Pro Ala Gly Leu Gln Val Asp Tyr Val Phe Arg Gly Val Glu His 25 Ala Val Arg Val Met Val Ser Gly Gln Val Leu Glu Leu Glu Val Glu 40 Asp Arg Met Thr Ala Asp Gln Trp Arg Gly Glu Phe Asp Ala Gly Phe 50 55 Ile Glu Asp Leu Thr His Lys Thr Gly Asn Phe Lys Gln Phe Asn Ile 70 75 Phe Cys His Met Leu Glu Ser Ala Leu Thr Gln Ser Ser Glu Ser Val Thr Leu Asp Leu Leu Thr Tyr Thr Asp Leu Glu Ser Leu Arg Asn Arg 105 Arg Trp Gly Ala Ala Xaa Ser Leu Ala Pro Arg Ser Ala Gln Leu Asn 115 120 Ser Lys Arg Tyr Leu Ile Leu Ile Tyr Ser Val Glu Phe Asp Arg Ile 135 His Tyr Pro Leu Pro Leu Pro Tyr Gln Gly Lys Pro Asp Pro Val Val 150 155 Leu Gln Gly Ile Ile Arg Ser Leu Lys Glu Glu Leu Gly Arg Leu Pro 165 170 175 Ser Pro Cys Pro Gly Pro Val Pro Pro Ala Ala Pro Gly Gly Leu Arg 180 185 190 Cys Val Arg Pro 195 <210> 4379 <211> 70 <212> PRT <213> Homo sapiens

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3983

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3984

Thr Ser Lys Phe Cys Lys Ile Ile Asp Leu Leu Lys Arg Phe Leu Phe 50 55 60 Ile Ile Pro Thr Leu Cys Lys Trp Lys Gly His Cys Val Pro Cys Val 70 75 Ser Ser Leu Gln Arg Leu Cys Pro Leu Ala Cys Phe Val Thr Ile Ser 90 Leu Gly Glu Glu Trp Val His Pro Ala Pro Arg Pro Val Val Ala Arg 105 Gly Leu Pro Cys Glu Phe 115 <210> 4381 <211> 23 <212> PRT <213> Homo sapiens <400> 4381 Glu Gln Val Val Ser Ile Phe Leu His Tyr Leu Phe Leu Glu Thr His 5 Lys Met Asp Cys Ile Phe Leu 20 <210> 4382 <211> 173 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (142) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (146) <223> Xaa equals any of the naturally occurring L-amino acids

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<223	3> Xa	aa ed	quals	any	of	the	natu	ırall	у ос	curi	ing	L-ar	nino	ació	ls
<220)>														
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<220	1~														
)- L> SI	rme													
	2> (1														
	-		quals	any	of	the	nati	ırall	Ly oc	curi	ring	L-ar	nino	acid	ds
)> 43 _		_	_	_		_	_		_,	_		_	~ 3	
	Tyr	Ile	Lys		Ser	GIn	Asn	Asn		Thr	Cys	Glu	Tyr	G1y 15	Ala
1				5					10					15	
Pro	Cys	Lys	Tyr	Ile	Arq	Lys	Pro	Ile	Asp	Tyr	Thr	Val	Leu	Asp	Asp
	-	-	20		Ū	-		25	, -	-			30	_	_
Va1	Gly	His	Gly	Val	Lys	Trp	Leu	Lys	Ala	Lys	His	Gly	Asn	Asn	Gln
		35					40					45			
_	- 1	_	m1	~1	m1	.	a	•	m1- · ·		D	D	m1	Q1	T
Pro	50	Arg	Thr	GIY	Thr	ьеи 55	ser	Arg	Thr	Asn	60	Pro	Thr	GIN	гуѕ
	50					33					00				
Pro	Pro	Ser	Pro	Pro	Met	Ser	Gly	Arg	Gly	Thr	Leu	Gly	Arg	Asn	Thr
65					70		_	_	_	75		_			80
Pro	Tyr	Lys	Thr		Glu	Pro	Val	Lys		Pro	Thr	Val	Pro		Asp
				85					90					95	
Пъ гъс	Mot	Πhχ	Ser	Dro	λla	λκα	Lou	Clv	Sor	Cln	Hic	Sor	Dro	Gly	λνα
ıyı	Mec	TIIL	100	PIO	Ата	Arg	ьец	105	ser	GIII	1112	Ser	110	GIA	ALG
			100					100					110		
Thr	Ala	Ser	Leu	Asn	Gln	Arg	Pro	Arg	Thr	His	Ser	Gly	Ser	Ser	Gly
		115					120					125			
Gly		Gly	Lys	Phe	Glu		Asn	Ser	Gly	Ser		Ser	Xaa	Gly	Xaa
	130					135					140				
Dree	Vac	ת ר ת	77-7	D~ ~	mh∽	Dro	g.~~	א 1 -	Dec	V	т1.	Lou	Larc	Dro	Dho
145	nad	ATG	Val	P10	150	P10	ser	AId	110	155	тте	ьeu	ηλρ	LIO	160
T-47					100					ر ر ـ					100
Val	Asp	Xaa	Ser	Asn	Phe	His	Arg	His	His	Phe	Xaa	Pro			
				165					170						

3986

<210> 4383 <211> 137 <212> PRT <213> Homo sapiens <400> 4383 Leu Glu Val Asp Trp Ser Leu Phe Asp Gly Phe Ala Asp Gly Leu Gly Val Ala Glu Ala Ile Ser Tyr Val Asp Pro Gln Phe Leu Thr Tyr Met 25 Ala Leu Glu Glu Arg Leu Ala Gln Ala Met Glu Thr Ala Leu Ala His 35 40 Leu Glu Ser Leu Ala Val Asp Val Glu Val Ala Asn Pro Pro Ala Ser Lys Glu Ser Ile Asp Ala Leu Pro Glu Ile Leu Val Thr Glu Asp His 70 Gly Ala Val Gly Gln Glu Met Cys Cys Pro Ile Cys Cys Ser Glu Tyr 90 85 Val Lys Gly Glu Val Ala Thr Glu Leu Pro Cys His His Tyr Phe His 100 105 Lys Pro Cys Val Ser Ile Trp Leu Gln Lys Ser Gly Thr Cys Pro Val Cys Arg Cys Met Phe Pro Pro Pro Leu 130 135 <210> 4384 <211> 53 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids

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Xaa Pro Xaa Leu Gly Arg Ser Gln Xaa Glu Pro Pro Leu Ser Ala Ser
                                      10
Xaa Pro Pro Ala Ser Gln Pro Pro Gln Met Arg Phe Leu Pro Leu Pro
                                 25
             2.0
Pro Arg Asn Gln Asn Pro His Cys Ser Gln Asp Gly Leu Ile Tyr Lys
                             40
Pro Asp Thr Cys Ser
     50
<210> 4385
<211> 74
<212> PRT
<213> Homo sapiens
<220>
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Gly Arg Gly Xaa Val Asn Ile Leu Ser Ala Leu Phe Pro Arg Gly Ile
                  5
Asn Ile Lys Val Met Asp Ile Leu Lys Ser Gln Phe Asn Phe Phe Leu
             20
                                  25
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3988

Phe Thr Met Gln Tyr Ser Arg Gly Thr Ser Asn Val Asp Leu Val Phe 35 40 45

Ser Ser Ser Asn Ala Leu Ile Thr Leu Pro His Arg Val Val Gly 50 55 60

Xaa Asn Lys Thr Leu Trp Xaa Gln Lys Lys 65 70

<210> 4386

<211> 82

<212> PRT

<213> Homo sapiens

<400> 4386

Glu Ala Ser Gly Gln Val Leu Pro Pro Asn Leu Lys Thr Leu Gly Met

1 5 10 15

Gln Leu Gly Arg Asp Leu Ser Arg Phe Cys Leu Asp Lys Gln Val Arg
20 25 30

Met Ala Glu His Trp Leu Ile Val Asn Gln Cys Phe Phe Ile Tyr Leu 35 40 45

Lys Tyr Ser Gln Gln Leu Ile Leu Arg Ser Phe Leu Lys Val Leu His 50 55 60

Leu His Pro His Asn Ser Pro Ile Gln Asn Met Glu Gln Gly Cys Gly 65 70 75 80

Ala Val

<210> 4387

<211> 63

<212> PRT

<213> Homo sapiens

<220>

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<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4387

Gly Asp Ser Val Ser Lys Lys Lys Lys Lys Xaa Val Pro Thr Val Tyr
1 5 10 15

3989

Val Trp Ala Leu Val Leu Glu Pro Val Leu Lys Glu Ser Gly Gln Ala 20 25 30

Gln Trp Leu Thr Pro Val Ile Ser Ala His Trp Glu Ala Glu Val Gly
35 40 45

Gly Ser Pro Glu Val Arg Ser Ser Arg Pro Ala Trp Pro Thr Trp 50 55 60

<210> 4388

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4388

Lys Lys Lys Leu Pro Ile Val Thr Leu Ala Val Leu Ile Asn Lys
1 5 10 15

Arg Cys Cys Val Arg Ser Pro Val Ser Val Trp Ile Gln Gln Leu Ser 20 25 30

Arg Glu Ser His Cys Met Gly Val Glu Leu Thr Val Leu Val Ile Cys 35 40 45

Lys Pro Pro Arg Pro Asn Leu Arg Val Tyr Leu Gly Phe Ser Val Cys 50 55 60

Pro Leu Gly Phe Cys Phe Thr Leu Phe Trp Cys Arg Phe Ser Ile Tyr 65 70 75 80

Ser Gln Ile Ser Phe Met Met Phe Lys Thr Phe Thr Asp Val Lys Trp 85 90 95

Arg Lys Gly Thr Glu Lys Lys Ile Phe Thr Lys
100 105

<210> 4389

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

3990

<220> <221> SITE <222> (35) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4389 Leu Pro Gly Ser Cys His Ser Pro Ala Ser Ala Ser Arg Val Ala Gly 10 Thr Thr Gly Thr Cys His His Thr Arg Leu Leu Phe Tyr Ile Phe Ser 20 25 Xaa Asp Xaa Phe His His Val Ser Gln Asp Gly Leu Asp Leu Leu Thr Ser <210> 4390 <211> 131 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (26) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (95) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (121) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4390 Pro Gln Ser Val Ala Ala Gly Ser Thr Ala Leu Gly Ser Asp Thr Val 15 5 10 Met Val Pro Met Ile Gly Gln Asp Leu Xaa Gly Glu Thr Gln Glu Thr 20 Arg Pro Cys Ser Ser Arg Pro Glu Gly Arg Gly Ala Pro Glu Leu Gly 40 Ser Gly Met Pro His Ser Leu Ala Thr Cys Phe Gly Tyr Ala Pro Cys

3991

50 55 60 Ser Ser Cys Thr Trp Leu Pro Arg Glu Asn Ser Asp Leu Ser Gly Lys 70 75 Trp Ser Gln Trp Leu Cys Gly Arg Pro Phe Leu Gln Pro Gly Xaa Gln 90 Ser Gly Phe Pro Trp Asp Cys Val Ala Pro Val Pro Thr Gly Leu Pro 100 105 110 Ile Pro His Ser His Cys Trp Thr Xaa Thr Arg Thr Gly His Arg Ala 120 Ser Phe Cys 130 <210> 4391 <211> 53 <212> PRT <213> Homo sapiens <400> 4391 Lys Thr Val Leu Arg Asp Ser Leu Val Phe Gly Thr Leu Arg Ser Ser Leu Gly Arg Ser Leu Ala Leu Ile Val Val Leu Lys Arg Val Leu Ser 25 Gly Leu Glu Pro Met Leu Ser Leu Leu Phe Met Gly Phe His Asn Ile 40 Leu Lys Leu Phe Val 50 <210> 4392 <211> 71 <212> PRT <213> Homo sapiens

25

3992

Val Pro Thr Phe Cys Ile Leu His Glu Thr Phe Gly Leu Asn Lys Ile 35 40 45

Leu Arg Ile Leu Tyr Phe Val Ser His Leu Pro Ser Cys Ser Leu Pro 50 55 60

Ser Ser Lys Asp Val Leu Tyr 65 70

<210> 4393

<211> 135

<212> PRT

<213> Homo sapiens

<220>

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<222> (128)

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<400> 4393

Ser Ser Arg Pro Gln Trp Gln Pro Cys Gly Lys Trp Pro Thr Lys Pro 1 5 10 15

Tyr Pro Gly Ser Pro Asn Thr Leu Cys Leu Glu Pro Leu Leu Arg Val 20 25 30

Tyr Ser Leu Arg Gly Leu Cys Gly Arg Ser Met Leu Gln Phe Lys His $35 \hspace{1cm} 40 \hspace{1cm} 45$

Val Ser Thr Thr Leu Leu Arg Ala Ala Trp Glu Arg Thr Gly His Gln 50 55 60

Asp Tyr Leu Phe Lys Tyr Lys Lys Arg Gly Lys His Thr His Gly Lys 65 70 75 80

Lys Ile Val Ser Thr Phe Phe Val Lys Pro Met Ser Val Leu Leu His
85 90 95

Thr Phe His Val Val Leu Cys Lys Cys Leu Ile Cys Val Ile Lys Leu
100 105 110

Met Gln Val Lys Lys Lys Lys Met Gly Glu Val Ile Pro Cys Xaa 115 120 125

Val Ile Ser Leu Leu Arg Val 130 135

PCT/US00/26524 WO 01/22920

3993

<210> 4394 <211> 134 <212> PRT <213> Homo sapiens <400> 4394 Ala Thr Ala Ser Arg Thr Arg Leu Ala Val His Glu Arg Ala Arg Pro 10 Gly Trp Arg Trp Gly Arg Ala Glu Ala Ala Glu Val Leu Arg Ala Thr 25 Gly Gly Trp Gln Trp Ala Gly Glu Arg Gly Arg Gln Ala Arg Leu Gly 40 Leu Gly Leu Trp Arg Arg Gly Thr Leu Cys Leu Gly Ser Leu Thr Ala 50 55 Pro Pro Gly Ser Pro Glu Arg Gly Thr Gly Gly Gly Gly Gly Ser 65 Trp Ala Pro Cys Ala Ala Gly Pro Arg Gly Ala Arg Val Ala Ala Gly 90 Ser Ala Gly Pro Asp Arg Val Asn Gly Arg Ala Trp Pro Val Pro Arg 105 Gly Ala Pro Ala Ala Thr Ala Leu Ala Ala Gly Thr Gly Val Leu Arg 115 120 125 Gly Arg Ser Leu Pro Phe 130 <210> 4395 <211> 47 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (23)

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3994

<221> SITE

<222> (42)

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<400> 4395

Ile Lys Ile Thr Ser Ile Cys Glu Leu Asn Phe Ile Ile Cys His Phe 1 5 10 15

Val Glu Ser Thr Leu His Xaa Leu Val Xaa Leu Glu Leu Ile Val Thr 20 25 30

Thr Arg Leu Tyr Asp Asn Ser Val Leu Xaa Leu Ile Pro Ile Ile 35 40 45

<210> 4396

<211> 40

<212> PRT

<213> Homo sapiens

<400> 4396

Ile Ser Leu Asn Pro Cys Tyr Val Phe Phe Phe Ser Gln Val Leu Gln 1 5 10 15

Asn Asp Tyr Cys Thr Trp Ser Ile Val Leu Ile Val Asn Phe Val Ile
20 25 30

Asn Leu Leu Cys Val Lys Arg Gly 35 40

<210> 4397

<211> 33

<212> PRT

<213> Homo sapiens

<400> 4397

Asp Pro Arg Val Arg Pro Arg Val Arg Lys Thr Glu Arg Asp Arg Lys

1 10 15

Glu Lys Leu Ile Gl
n Glu Gly Lys Leu Asp Arg Thr Phe His Leu Ser 20
 25 30

Tyr

3995

<211> 439 <212> PRT <213> Homo sapiens <400> 4398 His Glu Gln Pro Ser Ala Pro Ser Leu Arg Pro Ala Leu Pro Ser Cys Pro Pro Arg Gln Arg Leu Val Phe Leu Lys Thr His Lys Ser Gly Ser 20 25 Ser Ser Val Leu Ser Leu Leu His Arg Tyr Gly Asp Gln His Gly Leu 40 Arg Phe Ala Leu Pro Ala Arg Tyr Gln Phe Gly Tyr Pro Lys Leu Phe 55 Gln Ala Ser Arg Val Lys Gly Tyr Arg Pro Gln Gly Gly Gly Thr Gln 70 75 Leu Pro Phe His Ile Leu Cys His His Met Arg Phe Asn Leu Lys Glu 85 Val Leu Gln Val Met Pro Ser Asp Ser Phe Phe Phe Ser Ile Val Arg 100 105 Asp Pro Ala Ala Leu Ala Arg Ser Ala Phe Ser Tyr Tyr Lys Ser Thr 120 Ser Ser Ala Phe Arg Lys Ser Pro Ser Leu Ala Ala Phe Leu Ala Asn 130 135 140 Pro Arg Gly Phe Tyr Arg Pro Gly Ala Arg Gly Asp His Tyr Ala Arg 145 150 155 Asn Leu Leu Trp Phe Asp Phe Gly Leu Pro Phe Pro Pro Glu Lys Arg 170 Ala Lys Arg Gly Asn Ile His Pro Pro Arg Asp Pro Asn Pro Pro Gln 185 Leu Gln Val Leu Pro Ser Gly Ala Gly Pro Arg Ala Gln Thr Leu Asn 195 200 Pro Asn Ala Leu Ile His Pro Val Ser Thr Val Thr Asp His Arg Ser 210 215 220

Gln Ile Ser Ser Pro Ala Ser Phe Asp Leu Gly Ser Ser Ser Phe Ile

Gln Trp Gly Leu Ala Trp Leu Asp Ser Val Phe Asp Leu Val Met Val

235

3996

245 250 255 Ala Glu Tyr Phe Asp Glu Ser Leu Val Leu Leu Ala Asp Ala Leu Cys 265 Trp Gly Leu Asp Asp Val Val Gly Phe Met His Asn Ala Gln Ala Gly 280 His Lys Gln Gly Leu Ser Thr Val Ser Asn Ser Gly Leu Thr Ala Glu 290 295 300 Asp Arg Gln Leu Thr Ala Arg Ala Arg Ala Trp Asn Asn Leu Asp Trp 305 310 315 Ala Leu Tyr Val His Phe Asn Arg Ser Leu Trp Ala Arg Ile Glu Lys Tyr Gly Gln Gly Arg Leu Gln Thr Ala Val Ala Glu Leu Arg Ala Arg 345 340 Arg Glu Ala Leu Ala Lys His Cys Leu Val Gly Gly Glu Ala Ser Asp 355 360 Pro Lys Tyr Ile Thr Asp Arg Phe Arg Pro Phe Gln Phe Gly Ser 375 Ala Lys Val Leu Gly Tyr Ile Leu Arg Ser Gly Leu Ser Pro Gln Asp 390 395 Gln Glu Glu Cys Glu Arg Leu Ala Thr Pro Glu Leu Gln Tyr Lys Asp 405 410 415 Lys Leu Asp Ala Lys Gln Phe Pro Pro Thr Val Ser Leu Pro Leu Lys 420 425 Thr Ser Arg Pro Leu Ser Pro 435 <210> 4399 <211> 104 <212> PRT <213> Homo sapiens <400> 4399 Leu Val Asn Ser Met Thr Pro His Phe Arg Cys Leu Asn Thr Trp Tyr

Thr Arg Gln Tyr Lys Pro Ser Ala Ser Asn Ala Phe Met Val Cys Gly

25

20

3997

Val Leu Tyr Ala Thr Arg Thr Met Asn Thr Arg Thr Glu Glu Ile Phe
35 40 45

Tyr Tyr Tyr Asp Thr Asn Thr Gly Lys Glu Gly Lys Leu Asp Ile Val
50 55 60

Met His Lys Met Gln Glu Lys Val Gln Ser Ile Asn Tyr Asn Pro Phe 65 70 75 80

Asp Gln Lys Leu Tyr Val Tyr Asn Asp Gly Tyr Leu Leu Asn Tyr Asp 85 90 95

Leu Ser Val Leu Gln Lys Pro Gln 100

<210> 4400

<211> 143

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4400

Leu Pro Ser Pro Phe Leu Glu Thr Val Ser Thr Val Asp Ser Gly Ala
1 5 10 15

Pro Thr Asp Leu Ala Gln Leu Pro Thr Val Leu Lys Gln Pro Cys Cys
20 25 30

Ser Val Met Ala Ser Gly Gln Phe Val Asn Lys Leu Gln Glu Glu Val 35 40 45

Ile Cys Pro Ile Cys Leu Asp Ile Leu Gln Lys Pro Val Thr Ile Asp
50 55 60

Cys Gly His Asn Phe Cys Leu Lys Cys Ile Thr Gln Ile Gly Glu Thr 65 70 75 80

Ser Cys Gly Phe Phe Lys Cys Pro Leu Cys Lys Thr Ser Val Arg Lys 85 90 95

Asn Ala Ile Arg Phe Asn Ser Leu Leu Arg Asn Leu Val Glu Lys Ile 100 105 . 110

Gln Ser Ser Thr Xaa Pro Leu Arg Cys Ser Pro Lys Gly Lys Glu Ala

3998

120 125 115 Thr Leu Pro Glu Ala Pro Gly Asp Val Pro Leu Phe Leu Arg Gly 135 140 <210> 4401 <211> 50 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (49) <223> Xaa equals any of the naturally occurring L-amino acids Arg Met Glu Thr Ser Val Ile Lys Asp Ile Leu Phe Leu Thr Leu Ser 10 Arg Leu Leu Thr Cys Ser Leu Asp Tyr Asn Pro Thr Cys Lys Lys Asn 25 Leu Lys Met Val Met Arg Lys Val Arg Tyr Ile Tyr Ile Tyr Val Leu 40 45 Xaa Phe 50 <210> 4402 <211> 98 <212> PRT <213> Homo sapiens <400> 4402 Asn Ser Ala Arg Glu Arg Pro Ser Ser Val Lys Ser Leu Arg Ser Glu 5 10 Arg Leu Ile Arg Thr Ser Leu Asp Leu Glu Leu Asp Leu Gln Ala Thr 20 Arg Thr Trp His Ser Gln Leu Thr Gln Glu Ile Ser Val Leu Lys Glu

40

55

Leu Lys Glu Gln Leu Glu Gln Ala Lys Ser His Gly Glu Lys Glu Leu

Pro Gln Trp Leu Arg Glu Asp Glu Arg Phe Arg Leu Leu Arg Met

35

PCT/US00/26524 WO 01/22920

3999

65 70 75 80 Leu Glu Lys Arg Met Asp Arg Ala Asp Thr Arg Val Ser Phe Arg Gln 90 85 Thr Arg <210> 4403 <211> 74

<213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids

<400> 4403

Thr Lys Phe Xaa Gly Pro Leu Asn His Leu Asn Gly Leu Pro Ser Gly

Pro Gly His Ser Lys Ile Lys Pro Glu Arg Leu Val Gln Ala Met Met 25

Gly Ser Gly Ser Arg Thr Cys Leu Ile Ile Pro Ser Ser Ile Asn Ile 45 35 40

Asn Thr Asp Leu Lys Ala Asp Lys Lys His Leu Gln Ser Ile Leu Ser

Glu Val Phe Tyr Leu Glu Ala Ser Ser Ala 65 70

<210> 4404 <211> 305 <212> PRT

<212> PRT

<213> Homo sapiens

<400> 4404

Pro Ser Ser His Phe Ala Ser Ile Phe Glu Glu Ser His Val Pro Val

Ile Glu Glu Ser Leu Arg Val Gln Ile Cys Glu Lys Ala Glu Glu Leu 25

Lys Asp Ile Val Pro Glu Lys Lys Ser Thr Leu Asn Glu Asn Gln Pro

Glu Ile Lys His Gln Ser Leu Leu Gln Lys Asn Val Ser Lys Arg Asp Pro Pro Ser Ser His Gly His Ser Asn Lys Lys Asn Leu Leu Lys Val Glu Asn Gly Val Thr Arg Arg Gly Arg Ser Val Ser Pro Lys Lys Pro Ala Ser Gln His Ser Glu Glu His Leu Asp Lys Ile Pro Ser Pro Leu Lys Asn Asn Pro Lys Arg Arg Pro Arg Asp Gln Ser Leu Ser Pro Ser Lys Gly Glu Asn Lys Ser Cys Gln Val Ser Thr Arg Ala Gly Ser Gly Gln Asp Gln Cys Arg Lys Ser Arg Val Val Ala Ser Pro Lys Lys Gln Gln Lys Ile Glu Gly Ser Lys Ala Pro Ser Asn Ala Glu Ala Lys Leu Leu Glu Gly Lys Ser Arg Arg Ile Ala Gly Tyr Thr Gly Ser Asn Ala Glu Gln Ile Pro Asp Gly Lys Glu Lys Ser Asp Val Ile Arg Lys Asp Ala Lys Gln Asn Gln Leu Glu Lys Ser Arg Thr Arg Ser Pro Glu Lys Lys Ile Lys Arg Met Val Glu Lys Ser Leu Pro Ser Lys Met Thr Asn Lys Thr Thr Ser Lys Glu Val Ser Glu Asn Glu Lys Gly Lys Lys Val Thr Thr Gly Glu Thr Ser Ser Ser Asn Asp Lys Ile Gly Glu Asn Val Gln Leu Ser Glu Lys Arg Leu Lys Gln Glu Pro Glu Glu Lys Val Val Ser Asn Lys Thr Glu Asp His Lys Gly Lys Glu Leu Glu Ala Ala Val

Gln

4001

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<210> 4405
<211> 71
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4405
Ser Ser Asn Arg Phe Val Phe Lys Asp Pro Asn Arg Phe Val Ile Leu
                  5
                                     10
                                                          15
Asn Lys His Val Ala Ile Tyr Lys Thr Cys Leu Lys Val Leu Leu Ser
                                 25
             20
Pro Trp Asn Phe Phe Leu Tyr Phe Met Leu Ile Tyr Leu Xaa Phe Tyr
                             40
Ser Leu Ile Ile Ala Leu Glu Arg Pro His His Cys Leu His Gly Asn
Val Val Gly Thr Asn Thr Trp
 65
                     70
<210> 4406
<211> 86
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<222> (20)
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<220>
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<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
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<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids
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4003

<400> 4406

Ile Ser Cys Asn Tyr Cys Ser Cys Xaa Asn Ser Cys Glu Trp Leu Xaa 1 5 10 15

Val Xaa Leu Xaa Val Leu Gly Xaa Xaa Trp Tyr Thr Phe Val Gly Cys
20 25 30

Xaa Leu Lys Glu Xaa Ala Xaa Pro Val Cys Ser Leu Tyr His Thr Xaa 35 40 45

Leu Pro Leu Thr Ser Leu Gly Leu Leu Xaa Ser Lys Phe Cys Lys Pro 50 55 60

Phe Ser Gln Val Gln Arg Tyr Ile Leu Thr Leu Ser Ser Pro Xaa Leu 65 70 75 80

Leu Ser Arg Asn Phe Xaa 85

<210> 4407

<211> 34

<212> PRT

<213> Homo sapiens

<400> 4407

Ser Ala Cys Leu Gly Leu Pro Lys Cys Trp Asp Tyr Arg His Glu Pro 1 5 10 15

Pro His Val Ala His Phe Phe Phe Ile Ser Glu Phe Val Val Phe Thr
20 25 30

Leu Phe

<210> 4408

<211> 148

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

4004

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (24) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (37) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (42) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4408 Glu Ile Gly Tyr Leu Met Ser Lys Glu Xaa Asn Tyr Lys Arg Thr Arg Glu Tyr Ile Arg Xaa Leu Lys Xaa Val Pro Ser Ile Pro Tyr Leu Gly 25 20 Ile Tyr Leu Leu Xaa Leu Ile Tyr Ile Xaa Ser Ala Tyr Pro Ala Ser 40 45

Gly Val Ile Met Glu Asn Glu Gln Arg Ser Asn Gln Met Asn Asn Ile

55

Leu Arg Ile Ile Ala Asp Leu Gln Val Ser Cys Ser Tyr Asp His Leu 65 70 75 80

Thr Thr Leu Pro His Val Gln Lys Tyr Leu Lys Ser Val Arg Tyr Ile 85 90 95

Glu Glu Leu Gln Lys Phe Val Glu Asp Asp Asn Tyr Lys Leu Ser Leu 100 105 110

Arg Ile Glu Pro Gly Ser Ser Ser Pro Arg Leu Val Ser Ser Lys Glu
115 120 125

Asp Leu Ala Gly Pro Ser Ala Gly Ser Gly Ser Ala Arg Phe Ser Arg 130 135 140

Arg His Leu Ser 145

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<211> 63
<212> PRT
<213> Homo sapiens
<220>
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<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4409
Thr Pro Tyr Val Ser Leu Arg Ile Leu Tyr Asp Ser Glu Phe Ser Ile
                                      10
                                                          15
                  5
Ser Xaa Lys Trp Ser His Phe Cys Phe Val Pro Tyr Asn Ser Thr Glu
             20
                                 25
Ser Phe Phe Phe Xaa Arg Lys Gly Val Gly Lys Gly Lys Trp Glu Lys
Thr Trp Asn His Ile Pro Leu Phe Gly Ala Ala Arg Gln Glu Phe
                         55
<210> 4410
<211> 83
<212> PRT
<213> Homo sapiens
<220>
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<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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4006

<222> (62)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4410

Ile Xaa Arg Lys Ala Lys Ile Ser Trp Trp Lys Ser Glu Val Thr Arg
1 5 10 15

Arg Ser Phe Trp Ser Arg Val Leu Met Ser Ala Ala Pro Ala Lys Pro 20 25 30

Leu Ala Ser Cys Cys Ala Xaa Tyr Ser Val Ser Lys Ala Arg Ala Ile 35 40 45

Gly Gln His Ser Pro Gly Ser Xaa Trp Ala Thr Ser Ala Xaa Phe Phe 50 55 60

Phe Phe Phe Gly Xaa Trp Gln Arg His Gly Pro Asn Gly His His Gln 65 70 75 80

Ser Gly Leu

<210> 4411

<211> 39

<212> PRT

<213> Homo sapiens

<400> 4411

Leu Asn Thr Ser Tyr Leu Tyr Phe Phe Ser Ile Ser Phe His Leu Ser 1 5 10 15

Val Ser Ser Phe Ser His Asp Leu Thr Cys Leu Tyr Phe Leu Leu Thr 20 25 30

Asp Lys Ala Phe Lys Asn Ser 35

<210> 4412

<211> 78

<212> PRT

<213> Homo sapiens

4007 <400> 4412 His Phe Arg Glu Gly Gln Gly Ile Met Met Pro Ser Cys Lys Gly Ser 5 10 15 Leu Cys Glu Lys Lys Lys Ser Asn Asn Val Asp Phe Lys Ile Thr Lys 25 Asp Ile His Leu Gln Phe Met Lys Gly Lys Cys Ser Leu Asp Thr Lys 40 Leu Ile Lys Leu Asp Gln Glu Ile Leu Glu Leu Asn Ala Lys Asn Asn 55 Pro Cys Ile Tyr Gly Phe Asp Phe Tyr Ile Phe Pro Ala Ser 70 75 65 <210> 4413 <211> 62 <212> PRT <213> Homo sapiens <400> 4413 Val Pro Ile Ile Leu Lys Asn Ser His Lys Tyr Asn Lys Val His Cys 10 Phe Arg Val Phe Lys Lys Arg Val Val Pro Lys Ala Ile Leu Thr Leu 20 Leu Cys Tyr His Cys Lys Gly Val Ile Cys Met Tyr Tyr Ile Lys Lys 35

Lys Thr Leu Asn Ala Leu Leu Ser Pro Lys Tyr Leu Val Asn 50 55 60

<210> 4414
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (73)

4008

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (85) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (92) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (102) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (113) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4414 Ile Leu Glu Asp Leu Glu Pro Glu Cys Pro Leu Thr Gln Gln Ser His 10 Tyr Trp Leu Tyr Thr Gln Arg Xaa Ile Asn His Ser Thr Ile Lys Thr 20 Cys Ala Phe Tyr Tyr Lys Asp Met Cys Met Phe Ile Ala Ala Leu Phe 40 45 Thr Ile Ala Lys Thr Trp Asn Gln Pro Lys Cys Pro Ser Met Ile Asp 55 Trp Ile Lys Lys Thr Trp His Ile Xaa Thr Met Glu Tyr Tyr Ala Ala 65 70 75 Ile Lys Lys Asn Xaa Phe Met Xaa Phe Ala Gly Xaa Trp Met Lys Xaa 85 90 95

4009

Glu Thr Ile Ile Leu Xaa Lys Leu Thr Gln Glu Gln Lys Thr Lys His 100 105 110

Xaa Met Leu Ser Leu Ile Ser Gly Ser 115 120

<210> 4415

<211> 20

<212> PRT

<213> Homo sapiens

<400> 4415

Pro Leu Gly Ile Tyr Leu Arg Lys Asn Lys Ala Tyr Ile His Met

1 5 10 15

Lys Thr Cys Lys 20

<210> 4416

<211> 82

<212> PRT

<213> Homo sapiens

<400> 4416

Leu Pro Val Leu Trp Leu Gly Pro Ser Leu Ser Thr Ser Gly Glu Cys
1 5 10 15

Met Cys Leu Ser Asp Gln His His Cys Thr Arg Arg Ser Ser Glu Pro 20 25 30

Leu Ala Lys Cys His Thr His Ser Ser Gln Arg Arg Asp Glu Leu Lys $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Tyr Ser Glu Ile Met Lys Pro Glu Pro Val Pro Asp Leu Leu Leu 50 55 60

Pro Leu Ile Glu Leu Cys Asn Ser Lys Phe Lys Ile Arg Ser Arg 65 70 75 80

Glu Arg

<210> 4417

<211> 151

<212> PRT

4010

<213> Homo sapiens <220> <221> SITE <222> (146) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4417 Gly Thr Ser Ala Gly Ala Gln Thr Lys Gly Ala Leu Cys Gln Leu Lys 5 10 15 Val Pro Thr Glu Lys Leu Pro Ser Pro Leu Pro Thr Met Ala Asp Glu 20 25 Ile Asp Phe Thr Thr Gly Asp Ala Gly Ala Ser Ser Thr Tyr Pro Met Gln Cys Ser Ala Leu Arg Lys Asn Gly Phe Val Val Leu Lys Gly Arg 55 Pro Cys Lys Ile Val Glu Met Ser Thr Ser Lys Thr Gly Lys His Gly 65 70 His Ala Lys Val His Leu Val Gly Ile Asp Ile Phe Thr Gly Lys Lys 85 Tyr Glu Asp Ile Cys Pro Ser Thr His Asn Met Asp Val Pro Asn Ile 105 Lys Arg Asn Asp Tyr Gln Leu Ile Cys Ile Gln Asp Gly Tyr Leu Ser 120 125 115 Leu Leu Thr Glu Thr Gly Glu Val Arg Glu Asp Leu Lys Leu Pro Glu 130 135 140 Gly Xaa Thr Arg Gln Arg Lys 145 150 <210> 4418 <211> 75 <212> PRT <213> Homo sapiens <400> 4418 Asp Glu Glu Thr Val Lys Thr Pro Arg Lys Lys Thr Cys Val His Phe

Ser Gly Lys Phe Ser Asn Cys Val Ile Gln Phe Ser Phe Asn Tyr Ile

25

30

4011

Ile Trp Leu Tyr Ala Leu Lys Asn Ile Cys Leu Asn Val Pro Gly Phe 35 40 45

Leu Leu Val Leu Glu Ser Ala Glu Cys Trp Leu Cys Ser His Ser Tyr 50 55 60

Phe Cys Ile Gln Lys Gly Val Thr Pro Phe Ile 65 70 75

<210> 4419

<211> 48

<212> PRT

<213> Homo sapiens

<400> 4419

Val Lys Ala Thr Cys Leu Gly Phe Leu Asn His Ile Asn Cys Tyr Ile
1 5 10 15

Leu Tyr Phe Ile Ile Ile Leu Cys Val Ser Val Tyr Trp Asn Asn Met 20 25 30

Phe Tyr Leu Val Ser Trp Cys Lys Ser Phe Leu Asn Leu Leu Tyr 35 40 45

<210> 4420

<211> 38

<212> PRT

<213> Homo sapiens

<400> 4420

Tyr Ala Ser Ser Lys Leu Thr Leu Thr Lys Gly Asn Lys Ser Trp Ser 1 5 10 15

Ser Thr Ala Val Ala Ala Ala Leu Glu Leu Val Asp Pro Pro Gly Cys
20 25 30

Arg Asn Ser Ala Arg Val

<210> 4421

<211> 59

4012

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4421 Ser Cys Gln Ser Leu Asp Xaa Glu Val Ser Gly Lys Ser Leu Lys Tyr 10 Ala Phe Asp Thr Gly Lys Tyr Ile Leu Leu Met Phe His Lys Arg Ile 25 Leu Glu Ser Val Glu Asn Ile Asn Tyr Phe His Glu Leu Phe Leu Lys 35 40 Tyr Asn Phe Lys Val Leu Ile Phe Leu Phe Lys 55 <210> 4422 <211> 68 <212> PRT <213> Homo sapiens <400> 4422 Glu Val Ile Gln Ile Thr Phe Val Val Ile Phe Asn Tyr Ser Ser 15 5 10 Thr Leu Thr His Asp Glu Leu Arg Asn Ile Lys Asp Asn Cys Cys Leu 20 Asn Ser Thr Pro Arg Asp Thr Asp Leu Ile Gly Leu Gly Trp Arg Ser Gly Met Val Val Phe Phe Lys Leu Gln Ser Ser Ala Arg Gln Leu Leu 55 Tyr Val Gly Phe 65

<210> 4423 <211> 160 <212> PRT <213> Homo sapiens

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<220>
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<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (63)
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<220>
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<222> (69)
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<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4423
Gly Pro Gly Lys Arg Arg Leu Gln Gly Arg Ser Arg Gly His Met Ala
                  5
                                     10
Glu Gly Asp Ala Arg Ser Asp Gln Arg His Asn Glu Glu Ile Glu Ala
             20
                                 25
Met Ala Pro Ile Tyr Gly Glu Glu Trp Cys Val Ile Asp Asp Cys Ala
Lys Ile Phe Cys Ile Arg Ile Xaa Asp Asp Xaa Asp Asp Pro Xaa Trp
                         55
Thr Leu Cys Leu Xaa Val Met Leu Pro Asn Glu Tyr Pro Gly Thr Ala
 65
                     70
                                         75
Pro Pro Ile Tyr Gln Leu Asn Ala Pro Trp Leu Lys Gly Gln Glu Arg
                 85
                                      90
Ala Asp Leu Ser Asn Ser Leu Glu Glu Ile Tyr Ile Gln Asn Ile Gly
                                                     110
            100
                                 105
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4014

Glu Ser Ile Leu Tyr Leu Trp Val Glu Glu Asn Lys Arg Cys Ser Tyr 115 120 125

Tyr Lys Asn Leu Gln Val Thr Glu Pro Gly Pro Asp Val Lys Gly Gly 130 135 140

<210> 4424

<211> 70

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4424

Gly Leu Thr Ile Lys Xaa Ile Glu Lys Glu Thr Leu His Gly Met Ser 1 5 10 15

Phe Ile Pro Pro Pro Asn Lys Val Leu Lys Val Phe Ile Leu Pro Ser 20 25 30

Ile Phe Leu Lys Leu Phe Tyr Lys Arg Asp Phe Val Glu Val Pro Arg
35 40 45

Phe Cys Gln Thr Ser Ser Ser Leu Thr Arg Leu Arg Gly Pro Cys Gln 50 55 60

Gln Ser Asn Leu Arg Asp 65 70

<210> 4425

<211> 262

<212> PRT

<213> Homo sapiens

<400> 4425

Asp Ser His Gln Ala Arg Ser Arg Arg Leu Glu Ala Leu Trp Ser Pro 1 5 . 10 15

Ser	Leu	Gly	Glu 20	Val	Ser	Ser	Ser	Thr 25	Met	Lys	Gly	Ile	Leu 30	Val	Ala
Gly	Ile	Thr 35	Ala	Val	Leu	Val	Ala 40		Val	Glu	Ser	Leu 45	Ser	Суз	Val
Gln	Cys 50	Asn	Ser	Trp	Glu	Lys 55	Ser	Cys	Val	Asn	Ser 60	Ile	Ala	Ser	Glu
Cys 65	Pro	Ser	His	Ala	Asn 70	Thr	Ser	Cys	Ile	Ser 75	Ser	Ser	Ala	Ser	Ser 80
Ser	Leu	Glu	Thr	Pro 85	Val	Arg	Leu	Tyr	Gln 90	Asn	Met	Phe	Cys	Ser 95	Ala
Glu	Asn	Cys	Ser 100	Glu	Glu	Thr	His	Ile 105	Thr	Ala	Phe	Thr	Val 110	His	Val
Ser	Ala	Glu 115	Glu	His	Phe	His	Phe 120	Val	Ser	Gln	Cys	Cys 125	Gln	Gly	Lys
Glu	Cys 130	Ser	Asn	Thr	Ser	Asp 135	Ala	Leu	Asp	Pro	Pro 140	Leu	Lys	Asn	Val
Ser 145	Ser	Asn	Ala	Glu	Cys 150	Pro	Ala	Суз	Tyr	Glu 155	Ser	Asn	Gly	Thr	Ser 160
Cys	His	Gly	Lys	Pro 165	Trp	Lys	Суѕ	Tyr	Glu 170	Glu	Glu	Gln	Cys	Val 175	Phe
Leu	Val	Ala	Glu 180	Leu	Lys	Asn	Asp	Ile 185	Glu	Ser	Lys	Ser	Leu 190	Val	Leu
Lys	Gly	Cys 195	Ser	Asn	Val	Ser	Asn 200	Ala	Thr	Cys	Gln	Phe 205	Leu	Ser	Gly
Glu	Asn 210	Lys	Thr	Leu	Gly	Gly 215	Val	Ile	Phe	Arg	Lys 220	Phe	Glu	Cys	Ala
Asn 225	Val	Asn	Ser	Leu	Thr 230	Pro	Thr	Ser	Ala	Pro 235	Thr	Thr	Ser	His	Asn 240
Val	Gly	Ser	Lys	Ala 245	Ser	Leu	Tyr	Leu	Leu 250	Ala	Leu	Ala	Ser	Leu 255	Leu
Leu	Arg	Gly	Leu 260	Leu	Pro										

4016

<210> 4426

<211> 71 <212> PRT <213> Homo sapiens <400> 4426 Gln Leu Lys His Val Phe Ser Gln Glu Lys Met Thr Val Leu Met Met 10 Tyr Leu Met Asn Leu Asn Phe Lys Ser Gly Ala Ala Asn Trp Lys Glu 20 25 Asp Leu Trp Cys Phe Lys Leu Leu Trp Thr Leu Leu Arg Asn Leu Glu 40 Pro Met Glu Pro Leu Phe Ile Ala Met Gln Ile Thr Ile Leu Asn Glu 50 60 55 Cys Phe Leu Lys Ile Lys Tyr 70 65 <210> 4427 <211> 97 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (26) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (29) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (33) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4427 Ser Leu Lys Pro Ser Glu Lys Asn Ile Phe Thr Leu Phe Met Val Ala Thr Ala Ala Ile Cys Ile Leu Leu Asn Xaa Val Glu Xaa Ile Tyr Leu 25 Xaa Ser Lys Arg Cys His Glu Cys Leu Ala Ala Arg Lys Ala Gln Ala

4017

40 45 35 Met Cys Thr Gly His His Pro His Gly Thr Thr Ser Ser Cys Lys Gln 55 Asp Asp Leu Leu Ser Gly Asp Leu Ile Phe Leu Gly Ser Asp Ser His 70 75 Pro Pro Leu Leu Pro Asp Arg Pro Arg Asp His Val Lys Lys Thr Ile 95 90 85 Leu <210> 4428 <211> 353 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (75) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4428 Val Cys Ala Val Leu His Leu Gly Leu Leu Leu Ala Ala Trp Pro His 10 Xaa Ala Glu Pro Phe Pro Leu His Pro Leu Pro Ala Pro Gly Pro Ala 20 25 Pro Gly Thr Pro Ser Asp Xaa His Pro Leu Gln Pro Trp Gly Ser Leu

40

45

Arg	Val 50	Ala	Ala	Lys	Ala	Xaa 55	Cys	Leu	Ser	Ala	Ser 60	Ala	Leu	Ala	Val
Ile 65	Ala	His	Val	Leu	Cys 70	Cys	Суѕ	Ser	Val	Xaa 75	Thr	Met	Ser	Lys	Ser 80
Leu	Lys	Lys	Leu	Val 85	Glu	Glu	Ser	Arg	Glu 90	Lys	Asn	Gln	Pro	Glu 95	Val
Asp	Met	Ser	Asp 100	Arg	Gly	Ile	Ser	Asn 105	Met	Leu	Asp	Val	Asn 110	Gly	Leu
Phe	Thr	Leu 115	Ser	His	Ile	Thr	Gln 120	Leu	Val	Leu	Ser	His 125	Asn	Lys	Leu
Thr	Met 130	Val	Pro	Pro	Asn	Ile 135	Ala	Glu	Leu	Lys	Asn 140	Leu	Glu	Val	Leu
Asn 145	Phe	Phe	Asn	Asn	Gln 150	Ile	Glu	Glu	Leu	Pro 155	Thr	Gln	Ile	Ser	Ser 160
Leu	Gln	Lys	Leu	Lys 165	His	Leu	Asn	Leu	Gly 170	Met	Asn	Arg	Leu	Asn 175	Thr
Leu	Pro	Arg	Gly 180	Phe	Gly	Ser	Leu	Pro 185	Ala	Leu	Glu	Val	Leu 190	Asp	Leu
Thr	Tyr	Asn 195	Asn	Leu	Ser	Glu	Asn 200	Ser	Leu	Pro	Gly	Asn 205	Phe	Phe	Tyr
Leu	Thr 210	Thr	Leu	Arg	Ala	Leu 215	Tyr	Leu	Ser	Asp	Asn 220	Asp	Phe	Glu	Ile
Leu 225	Pro	Pro	Asp	Ile	Gly 230	Lys	Leu	Thr	Lys	Leu 235	Gln	Ile	Leu	Ser	Leu 240
Arg	Asp	Asn	Asp	Leu 245	Ile	Ser	Leu	Pro	Lys 250	Glu	Ile	Gly	Glu	Leu 255	Thr
Gln	Leu	Lys	Glu 260	Leu	His	Ile	Gln	Gly 265		Arg	Leu	Thr	Val 270	Leu	Pro
Pro	Glu	Leu 275	Gly	Asn	Leu	Asp	Leu 280	Thr	Gly	Gln	Lys	Gln 285	Val	Phe	Lys
Ala	Glu 290	Asn	Asn	Pro	Trp	Val 295	Thr	Pro	Ile	Ala	Asp 300	Gln	Phe	Gln	Leu
Gly 305		Ser	His	Val	Phe 310	Glu	Tyr	Ile	Arg	Ser 315	Glu	Thr	Tyr	Lys	Туг 320

4019

Leu Tyr Gly Arg His Met Gln Ala Asn Pro Glu Pro Pro Lys Lys Asn 325 330 335

Asn Asp Lys Ser Lys Lys Ile Ser Arg Lys Pro Leu Ala Ala Lys Asn 340 345 350

Arg

<210> 4429

<211> 45

<212> PRT

<213> Homo sapiens

<400> 4429

Gly Thr Arg Gln Asn Gly Pro Ala Ser His Ser Arg Ala Leu Val Gly
1 5 10 15

Ile Cys Thr Gly His Ser Asn Pro Gly Glu Asp Ala Arg Asp Gly Asp
20 25 30

Ala Glu Glu Val Arg Glu Leu Gly Thr Val Glu Glu Asn 35 40 45

<210> 4430

<211> 120

<212> PRT

<213> Homo sapiens

<400> 4430

Phe Leu His Leu Pro Ala Ile Phe Ser Gln Thr Phe Leu Arg Val Arg
1 5 10 15

Ala Asn Arg Gln Thr Arg Leu Asn Ala Arg Ile Gly Lys Met Lys Arg

Arg Lys Gln Asp Glu Gly Gln Arg Glu Gly Ser Cys Met Ala Glu Asp 35 40 45

Asp Ala Val Asp Ile Glu His Glu Asn Asn Asn Arg Phe Glu Glu Tyr
50 55 60

Glu Trp Cys Gly Gln Lys Arg Ile Arg Ala Thr Thr Leu Leu Glu Gly 65 70 75 80

Gly Phe Arg Gly Ser Gly Phe Ile Met Cys Ser Gly Lys Glu Asn Pro 85 90 95

4020

Asp Ser Asp Ala Asp Leu Asp Val Asp Gly Asp Asp Thr Leu Glu Tyr 110 100 105 Gly Glu Ala Thr Ile His Arg Gly 115 120 <210> 4431 <211> 244 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (67) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (173) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (212) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (221) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (232) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4431 Leu Leu Asp Arg Tyr Arg Glu Leu Gln Leu Ser Thr Glu Ser Lys Val .10 Thr Glu Phe Leu His Gln Ser Lys Leu Lys Ser Phe Glu Ser Glu Arg 20 25 30 Val Gln Leu Gln Glu Glu Thr Ala Arg Asn Leu Thr Gln Cys Gln 35 40 45 Leu Glu Cys Glu Lys Tyr Gln Lys Lys Leu Glu Val Leu Thr Lys Glu 55 50

4021

Phe Tyr Xaa Leu Gln Ala Ser Ser Glu Lys Arg Ile Thr Glu Leu Gln 65 70 75 Ala Gln Asn Ser Glu His Gln Ala Arg Leu Asp Ile Tyr Glu Lys Leu 85 90 Glu Lys Glu Leu Asp Glu Ile Ile Met Gln Thr Ala Glu Ile Glu Asn Glu Asp Glu Ala Glu Arg Val Leu Phe Ser Tyr Gly Tyr Gly Ala Asn 120 Val Pro Thr Thr Ala Lys Arg Arg Leu Lys Gln Ser Val His Leu Ala 130 135 Arg Arg Val Leu Gln Leu Glu Lys Gln Asn Ser Leu Ile Leu Lys Asp 155 Leu Glu His Arg Lys Asp Gln Val Thr Gln Leu Ser Xaa Glu Leu Asp 165 170 Arg Ala Asn Ser Leu Leu Asn Gln Thr Gln Gln Pro Tyr Arg Tyr Leu 180 185 190 Ile Glu Ser Val Arg Gln Arg Asp Ser Lys Ile Asp Ser Leu Thr Glu 195 200 Ser Ile Ala Xaa Leu Gly Glu Arg Met Ser Ala Thr Xaa Asn Lys Glu 215 Lys Ser Ala Leu Leu Gln Thr Xaa Gly Ile Lys Met Ala Leu Gly Phe 235 240 230 Arg Thr Asn Phe <210> 4432

<211> 96 <212> PRT <213> Homo sapiens <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE

<222> (17)

4022

<222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4432 Ser Ser Cys Cys Ala Ser Leu Pro Pro Thr Arg Gly Glu Val Ser Ala Xaa Ser Leu Leu Pro Pro Leu Pro Pro Leu Pro Pro Trp Thr Ile Ser 25 Leu Phe Pro Leu Cys Ser Trp Xaa Ala Gln Leu Cys Met Cys Val Trp 35 40 45 Gly Val Gly Val Gly Ser Gly Leu Ser Gly Phe Gly Arg Gly Leu Gly 55 Arg Val Arg Gly Gly Trp Arg Met Lys Ser Pro Thr Pro Phe Ser Ser 70 75 Ser Arg Pro Gln Lys Pro Gly Lys Gly Arg Val Pro Thr Leu Gly Xaa 90

<210> 4433 <211> 86 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (78) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4433 Asn Arg Ser Phe Phe Val Ser Pro Phe Lys Ser Thr Gly Phe Lys Arg 5 10 15 Gly Lys Cys Ile His Arg Pro Gln Cys Leu Ala Phe Ser Ser Ala Ser 20 Thr Trp Ser Thr Gly Leu Asp Ala Gln Thr Tyr Leu Gly Asn Tyr Phe

40

35

45

4023

Gly Arg Cys Leu Ser Leu Tyr Arg Asn Cys Ser Trp Tyr Phe Ile Leu 50 55 60 Leu Tyr Ile Tyr Ser Thr Cys Pro Leu Val Phe Asn Tyr Xaa Gln Ser 70 75 Leu Phe Arg Ser Lys Asn 85 <210> 4434 <211> 254 <212> PRT <213> Homo sapiens <400> 4434 Lys Ala Leu Asn Val Val Gln Ser Val Leu Gln Ile Asn Leu Ser Asn 10 Ser Thr Asn Arg Gly Ser Val Ala Ala Lys Lys Phe Lys Asp Ile Ile His Tyr Asp Pro Thr Lys Gln Asp His Ala Thr Tyr Glu Arg Lys Arg 40 Asp Asp Lys Pro Lys Glu Ser Lys Ala Lys Arg Lys Lys Lys Arg Glu 50 55 Glu Ala Glu Lys Leu Pro Glu Val Ser Lys Glu Met Tyr Tyr Asn Ile 70 75 Ala Met Asp Leu Lys Glu Ile Phe Gln Thr Thr Lys Tyr Thr Ser Glu 85 90 Lys Glu Glu Gly Thr Pro Trp Asn Glu Asp Cys Gly Lys Glu Lys Pro 100 105 Glu Glu Ile Gln Asp Pro Ala Ala Leu Thr Ser Asp Ala Glu Gln Pro 115 120 125 Ser Gly Phe Thr Phe Ser Phe Phe Asp Ser Asp Thr Lys Asp Ile Lys 135 Glu Glu Thr Tyr Arg Val Glu Thr Val Lys Pro Gly Lys Ile Val Trp 155 150

Gln Glu Asp Pro Arg Leu Gln Asp Ser Ser Glu Glu Glu Asp Val

170

165

4024

Thr Glu Glu Thr Asp His Arg Asn Ser Ser Pro Gly Glu Ala Ser Leu 180 185 190

Leu Glu Lys Glu Thr Thr Arg Phe Phe Phe Phe Ser Lys Asn Asp Glu
195 200 205

Arg Leu Gln Gly Ser Asp Leu Phe Trp Arg Gly Val Gly Ser Asn Met 210 225 220

Ser Arg Asn Ser Trp Glu Ala Arg Thr Thr Asn Leu Arg Met Asp Cys 225 230 235 240

Arg Lys Lys His Lys Asp Ala Lys Arg Lys Met Lys Pro Lys 245 250

<210> 4435

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4435

Leu Leu Asn Leu Val Lys Ala Val Phe Gly Gln Ala Cys Ala Arg Gly
1 5 10 15

His Leu Glu Cys Ser Thr His Trp Gln Ala Ser Pro Ile Pro Ile His 20 25 30

Pro Gly Ser Pro Arg Leu Gly Trp Asp Ile Asn Val Gly Ile Gly Lys 35 40 45

Lys Tyr Phe Leu Phe Arg Gly Lys Gln Glu Glu Thr Leu Pro Glu Ser 50 55 60

Asp Phe Leu Val Ile Ser Ile Ser Thr Glu Xaa 65 70 75

<210> 4436

<211> 47

<212> PRT

<213> Homo sapiens

<220>

PCT/US00/26524 WO 01/22920

4025 <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4436 Lys Leu Ile Arg Asp Xaa Ala Thr Asp Ser Leu Arg Ser Pro Ala Leu Pro Leu Asn Lys Cys Trp Cys Ile Gln Met Val Lys Tyr Ser Ala Ala 25 30 20 Ile Lys Gly Val Lys Thr Ala Ser Thr Tyr Leu Glu Ala His Leu 40 <210> 4437 <211> 220 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4437 Gly Xaa Asp Thr Leu Glu Ile Gln Gln Gln Ala Leu Leu Arg Glu Gln 1 10

Gln Lys Arg Leu Asn Arg Ile Lys Met Gln Glu Gly Ala Lys Val Asp

Leu Asp Ala Ile Pro Ser Ala Lys Val Arg Glu Gln Arg Met Pro Arg 40

Asp Asp Thr Ser Asp Phe Leu Lys Asn Ser Leu Leu Glu Ser Asp Ser 50 55

Ala Phe Ile Gly Ala Tyr Gly Glu Thr Tyr Pro Ala Ile Glu Asp Asp 65

Val Leu Pro Pro Pro Ser Gln Leu Pro Ser Ala Arg Glu Arg Arg Arg 85 90

Asn Lys Trp Lys Gly Leu Asp Ile Asp Ser Ser Arg Pro Asn Val Ala 105

Pro Asp Gly Leu Ser Leu Lys Ser Ile Ser Ser Val Asn Val Asp Glu 115 120

4026

Leu Arg Val Arg Asn Glu Glu Arg Met Arg Arg Leu Asn Glu Phe His
130 135 140

Asn Lys Pro Ile Asn Thr Asp Asp Glu Ser Ser Leu Val Asp Pro Asp 145 150 155 160

Asp Ile Met Lys His Ile Gly Asp Asp Gly Ser Asn Ser Val Ala Thr 165 170 175

Glu Pro Trp Leu Arg Pro Gly Thr Ser Glu Thr Leu Lys Arg Phe Met 180 185 190

Ala Glu Gln Leu Asn Gln Glu Gln Gln Gln Ile Pro Gly Lys Pro Gly
195 200 205

Thr Phe Thr Trp Gln Gly Leu Ser Thr Ala His Gly 210 215 220

<210> 4438

<211> 44

<212> PRT

<213> Homo sapiens

<400> 4438

Asn Gly Gly Asn Gly Asn Thr Tyr Leu Lys Leu Leu Arg Glu Leu Asn 1 5 10 15

Glu Ile Ile Leu Gln Asp Ser Tyr His Ser Lys Ala Val Asn Ala Pro 20 25 30

Phe Arg Val Pro Leu Leu Leu Thr Ala Leu Lys Ile 35 40

<210> 4439

<211> 47

<212> PRT

<213> Homo sapiens

<400> 4439

Tyr Ser Thr Leu Leu Glu Lys Pro Pro Pro Ser Pro Asp Arg Cys Glu
1 5 10 15

Arg Met Lys Val Thr Met Phe Cys Leu Arg Phe Ser Arg Phe Lys Leu 20 25 30

Leu Leu Ser Ser Val Ser Arg Asp Phe His Cys Trp Ala Cys Leu 35 40 45

4027

<210> 4440 <211> 57 <212> PRT <213> Homo sapiens <400> 4440 Leu Leu Glu Val Pro Glu Met Gly Leu Thr Phe Ile Lys Gln Ile Ala Tyr Tyr Asp Leu Ala Ala Ala Thr Val Gln Leu His Ile Asn Ser Thr 25 Asp Gln Thr Ile Cys Ile Trp His His Leu Leu Thr His Asp Met Arg 40 Leu Phe Cys Ile Asn Cys Tyr Asp Gly 50 55 <210> 4441 <211> 96 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (84) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (93) <223> Xaa equals any of the naturally occurring L-amino acids Val Val Glu Tyr Arg Ala Val Asn Phe His Ala Phe Phe Pro Asp Ile Lys Phe Tyr Ser Lys Lys Ala Thr Ser Asp Cys Thr Lys Asn Ile Lys 25 Ile His Ser Phe Tyr Lys Gly Val Asn Leu Asn Asn Val Ile Asp Trp 40 Asn Met Lys Ile Asn Gln Ser Phe Lys Ser Phe Leu Ala Asn Asp Pro 50 55

4028

Ile Leu Thr Pro Phe Leu Pro Arg Leu Glu Lys His Asn Val Phe Pro 65 70 75 80

Pro Lys Val Xaa Asn Pro Arg Lys Ala Pro Val Ser Xaa Thr Asn Val 85 90 95

<210> 4442

65

<211> 155 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (143) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4442 Asn Ser Ala Ser Gln Arg Ser Ser Ser Leu Pro Pro Ser Asn Arg Lys 10 Ser Ser Thr Pro Lys Lys Thr Tyr Ser Glu Lys Ala Thr Asp Asn His Val Asn His Ser Ser Cys Pro Glu Pro Val Pro Asn Gly Val Lys Lys 40 Val Ser Val Arg Thr Ala Trp Glu Lys Asn Lys Ser Val Ser Tyr Glu 50 55

Gln Cys Lys Pro Val Ser Val Thr Pro Gln Gly Asn Asp Phe Glu Tyr

Thr Ala Lys Ile Arg Thr Leu Ala Glu Thr Glu Arg Phe Phe Asp Glu

Leu Thr Lys Glu Lys Asp Gln Ile Glu Ala Ala Leu Ser Arg Met Pro 100 105 110

Ser Pro Gly Gly Arg Ile Thr Leu Gln Xaa Arg Leu Asn Gln Glu Ala

120

75

90

70

85

115

4029

Leu Glu Asp Arg Leu Glu Gly Leu Ile Glu Asn Trp Gly Ser Xaa Arg 130 135 140

Met Thr Leu Lys Asn Ser Met Phe Cys Ala Pro 145 150 155

<210> 4443

<211> 97

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (97)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4443

Ile Arg Glu Thr Phe Ser Ile Tyr Leu Phe Val Leu Pro Ala Trp Glu
1 5 10 15

Ser Asp Ser Thr Lys Tyr Phe Pro Ala Gly Trp Gly Ser Val Ser Gln 20 25 30

Arg Asn His Pro Phe Pro Thr Phe Arg Leu Ile Leu Tyr Pro Ser Ile 35 40 45

Xaa Pro Val Leu Met Glu Ala Lys Asp Asn Pro Arg Val Phe Ile Gly 50 55 60

Asn Ser Leu Glu Leu Cys Ala Ile Val Phe Val Val Leu Leu Pro Phe 65 70 75 80

Phe Phe Leu Asn Ile Tyr Val Gly Asn Ser Ile Cys Xaa Gly Ile Leu 85 90 95

Xaa

4030

<210> 4444 <211> 161 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (43) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4444 Thr Glu Thr Cys Phe Ala Trp Trp Met Ser Ala Ser Ser Pro Arg Arg Pro Ser Ser Glu Thr Pro Ala Ala Pro Thr Cys Phe Leu Arg Ser Ser 20 25 Ala Ala Ala Val Thr Ser Ala Ala Thr Trp Xaa Leu Cys Lys Asp Ser Ser Phe Ser Glu Asp Gly Ala Val Leu Pro Gln Trp Leu Cys Ser Asn 55 Cys Gln Ala Pro Tyr Asp Ser Ser Ala Ile Glu Met Thr Leu Val Glu 70 75 Val Leu Gln Lys Lys Leu Met Ala Phe Thr Leu Gln Asp Leu Val Cys 85 Leu Lys Cys Arg Gly Val Lys Glu Thr Ser Met Pro Val Tyr Cys Ser 100 105 110 Cys Ala Gly Asp Phe Ala Leu Thr Ile His Thr Gln Val Phe Met Glu 120 Gln Ile Gly Ile Phe Arg Asn Ile Ala Gln His Tyr Gly Met Ser Tyr 130

Leu Leu Glu Thr Leu Glu Trp Leu Leu Gln Lys Asn Pro Gln Leu Gly

155

160

150

His

145

<210> 4445 <211> 112

<212> PRT

<213> Homo sapiens

4031

<220> <221> SITE <222> (77) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (89) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4445 Asn Val Phe Val Val Thr Asp Phe Gln Asp Ser Val Phe Asn Asp Leu 10 Tyr Lys Ala Asp Cys Arg Val Ile Gly Pro Pro Val Val Leu Asn Cys 20 25 Ser Gln Lys Gly Glu Pro Leu Pro Phe Ser Cys Arg Pro Leu Tyr Cys 40 35 Thr Ser Met Met Asn Leu Val Leu Cys Phe Thr Gly Phe Arg Lys Lys Glu Glu Leu Val Arg Leu Val Thr Leu Val His His Xaa Gly Gly Val 70 75 Ile Arg Lys Asp Phe Asn Ser Lys Xaa Thr His Leu Val Ala Ile Val 90 85 His Lys Glu Lys Ile Gln Gly Cys Cys Glu Ser Arg Tyr Ser Ile Met 105 100

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<210> 4446
<211> 254
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4446
Ala Glu Asp Pro Ala Gly Gly Leu Ala Gly Gln Asp Thr Met Phe Ala
1 5 10 15
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4032

Arg Gly Leu Lys Arg Lys Cys Val Gly His Glu Glu Asp Val Glu Gly 25 2.0 Ala Leu Ala Gly Leu Lys Thr Val Ser Ser Tyr Ser Leu Gln Arg Gln 40 Ser Leu Leu Asp Met Ser Leu Val Lys Leu Gln Leu Cys His Met Leu Val Glu Pro Asn Leu Cys Arg Ser Val Leu Ile Ala Asn Thr Val Arg 70 75 Gln Ile Gln Glu Glu Met Thr Gln Asp Gly Thr Trp Arg Thr Val Ala 90 85 Pro Gln Ala Ala Glu Arg Ala Pro Xaa Asp Arg Leu Val Ser Thr Glu Ile Leu Cys Arg Ala Ala Trp Gly Gln Glu Gly Ala His Pro Ala Pro 120 Gly Leu Gly Asp Gly His Thr Gln Gly Pro Val Ser Asp Leu Cys Pro 135 140 130 Val Thr Ser Ala Gln Ala Pro Arg His Leu Gln Ser Ser Ala Trp Glu 145 150 155 Met Asp Gly Pro Arg Glu Asn Arg Gly Ser Phe His Lys Ser Leu Asp 170 Gln Ile Phe Glu Thr Leu Glu Thr Lys Asn Pro Ser Cys Met Glu Glu 180 185 Leu Phe Ser Asp Val Asp Ser Pro Tyr Tyr Asp Leu Asp Thr Val Leu 195 200 Thr Gly Met Met Gly Gly Ala Arg Pro Gly Pro Cys Glu Gly Leu Glu 210 215 220 Gly Leu Ala Pro Ala Thr Pro Gly Pro Ser Ser Ser Cys Lys Ser Asp 240 230 235 Leu Gly Glu Leu Asp His Val Val Glu Ile Leu Val Glu Thr 245 250

<210> 4447

<211> 169

<212> PRT

4033

<213> Homo sapiens <220> <221> SITE <222> (98) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (153) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (159) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4447 Ser Lys Val Lys Gln Thr Glu Asn Cys Gly Gly Phe Val Gly Val Gln 10 Leu Arg Asn Met Ala Gln Glu Thr Asn His Ser Gln Val Pro Met Leu 25 Cys Ser Thr Gly Cys Gly Phe Tyr Gly Asn Pro Arg Thr Asn Gly Met 40 Cys Ser Val Cys Tyr Lys Glu His Leu Gln Arg Gln Asn Ser Ser Asn 55 50 Gly Arg Ile Ser Pro Pro Ala Thr Ser Val Ser Ser Leu Ser Glu Ser 75 65 Leu Pro Val Gln Cys Thr Asp Gly Ser Val Pro Glu Ala Gln Ser Ala 90 Leu Xaa Ser Thr Ser Ser Ser Met Gln Pro Ser Pro Val Ser Asn Gln 105 110 100 Ser Leu Leu Ser Glu Ser Val Ala Ser Ser Gln Leu Asp Ser Thr Ser 125 115 Val Asp Lys Ala Val Pro Glu Thr Glu Asp Val Gln Ala Ser Val Ser 135 Asp Thr Ala Gln Gln Pro Ser Glu Xaa Gln Ser Lys Ser Leu Xaa Lys 160 150 155 Pro Lys Gln Lys Lys Glu Ser Leu Val 165

4034

<210> 4448 <211> 374 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (25) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (38) <223> Xaa equals any of the naturally occurring L-amino acids Ser Pro Ser Ser Thr Ala Ala Thr Ser Ala Phe Arg Ile Ala Ser Ala Cys Leu Asp Glu Leu Ser Cys Glu Xaa Leu Leu Ala Gly Ala Gly Gly 25 Ala Gly Ala Gly Ala Xaa Pro Gly Thr Ala Ser Pro Pro Thr Gly Ser 45 40 Val Pro Gly Asp Pro Val Arg Ile His Cys Asn Ile Thr Glu Ser Tyr 50 55 Pro Ala Val Pro Pro Ile Trp Ser Val Glu Ser Asp Asp Pro Asn Leu 70 75 Ala Ala Val Leu Glu Arg Leu Val Asp Ile Lys Lys Gly Asn Thr Leu 90 85 Leu Leu Gln His Leu Lys Arg Ile Ile Ser Asp Leu Cys Lys Leu Tyr 100 Asn Leu Pro Gln His Pro Asp Val Glu Met Leu Asp Gln Pro Leu Pro 115 120 125 Ala Glu Gln Cys Thr Gln Glu Asp Val Ser Ser Glu Asp Glu Asp Glu 135 Glu Met Pro Glu Asp Thr Glu Asp Leu Asp His Tyr Glu Met Lys Glu 150 155 Glu Glu Pro Ala Glu Gly Lys Lys Ser Glu Asp Asp Gly Ile Gly Lys 165 170 175

4035

Glu Asn Leu Ala Ile Leu Glu Lys Ile Lys Lys Asn Gln Arg Gln Asp 180 185 190

Tyr Leu Asn Gly Ala Val Ser Gly Ser Val Gln Ala Thr Asp Arg Leu 195 200 205

Met Lys Glu Leu Arg Asp Ile Tyr Arg Ser Gln Ser Phe Lys Gly Gly 210 215 220

Asn Tyr Ala Val Glu Leu Val Asn Asp Ser Leu Tyr Asp Trp Asn Val 225 230 235 240

Lys Leu Leu Lys Val Asp Gln Asp Ser Ala Leu His Asn Asp Leu Gln 245 250 255

Ile Leu Lys Glu Lys Glu Gly Ala Asp Phe Ile Leu Leu Asn Phe Ser 260 265 270

Phe Lys Asp Asn Phe Pro Phe Asp Pro Pro Phe Val Arg Val Val Ser 275 280 285

Pro Val Leu Ser Gly Gly Tyr Val Leu Gly Gly Gly Ala Ile Cys Met 290 295 300

Glu Leu Leu Thr Lys Gln Gly Trp Ser Ser Ala Tyr Ser Ile Glu Ser 305 310 315 320

Val Ile Met Gln Ile Ser Ala Thr Leu Val Lys Gly Lys Ala Arg Val 325 330 335

Gln Phe Gly Ala Asn Lys Ser Gln Tyr Ser Leu Thr Arg Ala Gln Gln 340 345 350

Ser Tyr Lys Ser Leu Val Gln Ile His Glu Lys Asn Gly Trp Tyr Thr 355 360 365

Pro Pro Lys Glu Asp Gly 370

<210> 4449

<211> 146

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

4036

<220> <221> SITE <222> (73) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (138) <223> Xaa equals any of the naturally occurring L-amino acids Ala Glu Glu Val Tyr Ala Gln Leu Gln Lys Met Leu Leu Glu Gln Gln 10 Glu Lys Cys Leu Leu Phe Ser Lys Gln Phe Met His Gln Gly Asn Val 25 Ala Glu Thr Thr Arg Phe Glu Lys Leu Ala Gln Asp Arg Lys Lys Gln 40 Leu Glu Ile Leu Gln Leu Ala Gln Ala Gln Gly Leu Xaa Pro Pro Thr 50 55 60 His His Phe Glu Leu Lys Thr Phe Xaa Thr Val Arg Ile Phe Ser Gln Leu Asn Ser Thr Glu Met His Leu Ile Ile Val Arg Gly Met Asn Leu 85 90 Pro Ala Pro Pro Gly Val Thr Pro Asp Asp Leu Asp Ala Phe Val Arg 105 Phe Glu Phe His Tyr Pro Asp Ser Asp Gln Ala Gln Lys Ser Lys Thr 115 120 Ala Val Val Asn Asn Thr Asn Ser Pro Xaa Leu Ile Thr Leu Gln Leu 130 135 140 Asn Ser 145 <210> 4450 <211> 61 <212> PRT <213> Homo sapiens <400> 4450 Ile Met Lys Glu Ser Ser Ser Val Leu Ala Lys Cys Ser Ser Ile Ala 5 10 15

4037

Gly Tyr Ile Gln Trp Ser Ser Ile Asn Ser Tyr Leu Ser Gly Leu Asn 20 25 30

Gln Asn Cys Val Ser Leu Asn Ser Tyr His Thr Glu Gly Ala Ser Gln 35 40 45

Ile Thr Ile Phe Leu Ser Ala Val Phe Leu Gln Lys Ser 50 55 60

<210> 4451

<211> 29

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4451

<210> 4452

<211> 108

<212> PRT

<213> Homo sapiens

<400> 4452

Asp His Leu Asp Leu Thr Lys Gly Thr Ile Lys Trp Cys Gln Val Leu 1 5 10 15

Gly Ser Arg Arg Val Tyr Lys Lys Lys Met Asn Lys Asp Phe Thr Tyr
20 25 30

Trp Gly Ser Gly Ile Thr Gly Cys Leu Asp Cys Pro Ala Thr Gln Leu 35 40 45

Pro Pro Ile Lys Ser Phe Ile Thr Leu Gln Glu Gly Pro Asp Ala Ser 50 55 60

Ile Ile Ser Thr Pro Cys Phe Ser Val Ile Ser Phe Glu Val Ala Lys 65 70 75 80

4038

Asn Gly Ser Gln Lys Lys Met Leu Arg Leu Phe Ser Ser Ile Tyr Ser 85 90 Cys Tyr Phe Ala Glu Asp Arg Val Asn Phe Phe Ser 100 <210> 4453 <211> 65 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (33) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4453 Ile Ser Gly Lys Trp Leu Thr Glu Arg Thr Ile Arg Cys Val Tyr Ile Thr Ser Tyr Ser Leu Phe Leu Thr Ala Leu Met Leu Trp His Cys Tyr 25 Xaa His Ile Tyr Val Phe Leu Ile Tyr Ser Ser Asp Ser Phe Asn Phe 40 Leu Ser Ser Leu Ser Ile Arg Cys Ala His Leu Leu Cys Gln Val Glu . 50 55 Val 65 <210> 4454 <211> 293 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

4039

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<220>
 <221> SITE
 <222> (31)
 <223> Xaa equals any of the naturally occurring L-amino acids
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 Val Pro Gly Pro Ala Ala Arg Gly Leu Gly Arg Leu Arg Arg Gly Val
                    5
                                       10
 Xaa Val Arg Gly Arg Arg Thr Xaa Ala Lys Val Ala Ile Lys Xaa Leu
 Tyr Arg Pro Phe Gln Ser Glu Leu Phe Ala Lys Arg Ala Tyr Arg Glu
                               40
 Leu Arg Leu Leu Lys His Met Arg His Glu Asn Val Ile Gly Leu Leu
       50
                           55
 Asp Val Phe Thr Pro Asp Glu Thr Leu Asp Asp Phe Thr Asp Phe Tyr
  65
                       70
                                           75
 Leu Val Met Pro Phe Met Gly Thr Asp Leu Gly Lys Leu Met Lys His
                   85
                                       90
 Xaa Lys Leu Gly Glu Asp Arg Ile Gln Phe Leu Val Tyr Gln Met Xaa
                                  105
              100
 Lys Gly Leu Arg Tyr Ile His Ala Ala Gly Ile Ile His Arg Asp Leu
          115
                              120
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PCT/US00/26524 WO 01/22920

4040

Lys Pro Gly Asn Leu Ala Val Asn Glu Asp Cys Glu Leu Lys Ile Leu 135 Asp Phe Gly Leu Ala Arg Gln Ala Asp Ser Glu Met Thr Gly Tyr Val 150 155 Val Thr Arg Trp Tyr Arg Ala Pro Glu Val Ile Leu Asn Trp Met Arg 170 165 Tyr Thr Gln Thr Val Asp Ile Trp Ser Val Gly Cys Ile Met Ala Glu 180 185 Met Ile Thr Gly Lys Thr Leu Phe Lys Gly Ser Asp His Leu Asp Gln 200 Leu Lys Glu Ile Met Lys Val Thr Gly Thr Pro Pro Ala Glu Phe Val 210 215 Gln Arg Leu Gln Ser Asp Glu Ala Lys Asn Tyr Met Lys Gly Leu Pro 235 225 230 Glu Xaa Xaa Glu Glu Gly Phe Cys Leu Tyr Pro Asp Gln Cys Lys Pro 250 245 Ser Gly Cys Glu Pro Pro Gly Glu Asp Ala Gly Ala Gly Arg Gly Ala 265 Ala Gly Asp Gly Arg Arg Gly Ala Gly Pro Ser Leu Leu Arg Val Pro 275 280 285 Ala Arg His Gly Arg 290

<210> 4455

<211> 82

<212> PRT

<213> Homo sapiens

<400> 4455

Thr Arg Gly Leu His Leu Thr Leu Ser Thr Tyr Gln Arg Asn Thr Trp 10 15

Gly Asp Phe Leu Glu Ala Ile Leu Pro Leu Ala Val Gln Ala Ala Met 20 25

Glu Glu Asn Val Glu Phe Arg Arg Gly Leu Pro Arg Asp Phe Met Asp

Tyr Met Gly Ala Gln His Ser Asp Ser Lys Asp Pro Gly Lys Asn Arg

4041

50 55 60 Phe His Gly Glu Gly Ala Gly Leu Gly Cys Pro Pro Gly Thr Leu Cys 70 75 65 Ser Cys <210> 4456 <211> 72 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (1) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (44) . <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (47) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4456 Xaa Xaa Phe Leu Ser Arg Leu Pro Phe Met Trp Val Lys Asp Lys Val 5 10 15 Glu Asn Thr Leu Leu Tyr Leu Val Ser Arg Val Asn Leu Met Ser Ser 20 25 Ser Leu Cys Phe Glu Ile Phe Trp Asn Val Ile Xaa Asn Tyr Xaa Arg 40 35 Trp Ser Met Tyr Val Leu Gly Leu Val Leu Met Phe Asn Met His Tyr Leu Ile Gln Ser Ser Gln Gln Ser 65 70

4042

<210> 4457

<211> 38

<212> PRT

<213> Homo sapiens

<400> 4457

Asp His Val Leu Cys Arg Asp Met Asp Glu Ala Gly Thr Ile Ile Leu 1 5 10 15

Ser Lys Leu Thr Glu Glu Glu Glu Thr Lys His His Met Phe Ser Leu 20 25 30

Val Ser Gly Thr Glu Gln 35

<210> 4458

<211> 114

<212> PRT

<213> Homo sapiens

<400> 4458

Pro Arg Phe Cys Gly Ala Leu Arg His Ser Leu Asn Ala Thr Leu Thr 1 5 10 15

Pro Arg Leu Glu Asn Pro Val Leu Met Trp Trp Ala Gly Pro Leu Leu 20 25 30

Met Glu Asp Gly Gly Asp Gly Val Val Leu Lys Gly Ser Val Val Leu 35 40 45

Glu Val Tyr Thr Pro Leu Arg Thr Ala Cys Gln Glu Pro Gln Ser Ser 50 60

Phe Thr Ser Ala Lys Ala Glu Arg Glu Arg Thr Trp Glu Ala Phe Cys 65 70 75 80

Ser Leu Ser Tyr Pro Ser Ile Asn Ser Ile Ile Val Asp Ala Lys Gly 85 90 95

Asp Gly Asp Val Pro Ser Thr Val Val Ala Val Thr Thr Leu Thr Ser 100 105 110

Leu Ser

4043

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<210> 4459
<211> 47
<212> PRT
<213> Homo sapiens
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Asn Gln Asn Tyr Xaa Trp Glu Lys Asn Lys Phe Ile Tyr Glu Asn Val
                                     10
Lys Ile Ile Leu Lys Val Leu Phe Ser Asn Lys Met Glu Lys Leu Val
             20
                                  25
Lys Xaa Xaa Lys Lys Lys Lys Lys Arg Xaa Pro Leu Xaa Gly
                              40
                                                  45
<210> 4460
<211> 115
<212> PRT
<213> Homo sapiens
<400> 4460
Ser Ala Leu Phe Ser Leu Ala Glu Asp Lys Gly Ile His Ala Ala Pro
                  5
                                     10
                                                          15
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4044

Arg Phe Leu Val Ala Arg Leu Arg Thr Lys Gln Leu Arg Ser Ser His 25 20 Ser Asp Pro Asn Val Leu Thr Val Leu Phe Leu Ile Thr Val Thr Leu 40 Lys Val Gln Ala Lys Cys Cys Gln Thr Pro Trp Leu Lys Gln Trp Arg 50 55 Val Met Gly Lys Ala Val Glu Gly Pro Gln Pro Thr His Trp Leu Lys 75 Leu Pro Pro Thr Ala Thr Met Asn Pro Thr Ala Val Tyr Ala Pro Ile 90 Phe Leu Phe Leu Tyr Leu His Pro His Asp Ser Gln Cys Trp Ile Phe 105 Leu His Glu 115 <210> 4461 <211> 106 <212> PRT <213> Homo sapiens <400> 4461 Gln Ser Met Val Val Ser His Tyr Ala Arg Pro Asp Leu Pro Leu Leu 10 Met Val Ile Ser Cys Glu Ser Phe Phe Leu Pro Leu His Ser Phe Tyr 25 20 Ser Val Tyr Ser Pro Met Pro His Pro Lys Ser Cys Thr Val Asn Trp 35 40 Pro Val Lys Gly Thr Pro Thr Phe Lys Gln Gly Arg Gln Asp Thr Thr 55 Gly Arg Arg Leu Ile Ala Gln Thr Leu Asp Cys Ser Gly Trp Asp Gln 70 75 65 Ile Leu Ala Pro Leu Leu Ala Ser Cys Val Ala Leu Gly Lys Leu Leu 90 Asn Leu Ser Gly Pro Gln Phe Leu Pro Leu

105

100

4045

<210> 4462

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<211> 49
<212> PRT
<213> Homo sapiens
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<220>
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<222> (28)
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<400> 4462
Phe Tyr Tyr Phe Ser Leu Phe Lys Xaa Glu Xaa Gln Ile Glu Ser Xaa
                  5
                                     10
Gln Ile Leu Gln Met Thr Gly Ile Phe Val Ser Xaa Leu Ser Phe Cys
                                  25
             20
Val Phe Phe Leu Asn Lys Ile Phe Arg Gly Asn Ala Phe Thr Glu Lys
         35
Lys
<210> 4463
<211> 157
<212> PRT
<213> Homo sapiens
<400> 4463
Ile Arg His Glu Ser Lys Arg Asn Gln Val Ser Tyr Val Arg Pro Ala
Glu Pro Ala Phe Leu Ala Arg Phe Lys Glu Arg Val Gly Tyr Arg Glu
```

4046

25 20 30 Gly Pro Thr Val Glu Thr Lys Arg Ile Gln Pro Gln Pro Pro Asp Glu 40 35 Asp Gly Asp His Ser Asp Lys Glu Asp Glu Gln Pro Gln Val Val 55 Leu Lys Lys Gly Asp Leu Ser Val Glu Val Met Lys Ile Lys Ala 70 75 Glu Ile Lys Ala Ala Lys Ala Asp Glu Glu Pro Thr Pro Ala Asp Gly 85 90 Arg Ile Ile Tyr Arg Lys Pro Val Lys His Pro Ser Asp Glu Lys Tyr 110 100 105 Ser Gly Leu Thr Ala Ser Ser Lys Lys Lys Pro Asn Glu Asp Glu 120 Val Asn Gln Asp Ser Val Lys Lys Asn Ser Gln Lys Gln Ile Lys Asn 130 135 140 Ser Ser Leu Leu Ser Phe Asp Asn Glu Asp Glu Asn Glu 150 155 145 <210> 4464 <211> 94 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4464 Asn Tyr Asp Cys Phe Xaa Xaa Ser Pro Phe Gly Thr Arg Ser Phe Gln 10 Leu Lys Gly Arg Gly Asn Ile Tyr Leu Lys Ser Ser Ile His Glu Arg

Lys Arg Met Glu Thr Met Ser Ser Val Leu Leu Pro Lys His Pro

4047

35 40 45 Cys Met Cys Val His Val Cys Trp Arg Val Cys Val Cys Met His Ile 55 Ser Lys Cys Val Phe Ala Cys Val Cys Trp Gly Val Tyr Val Ile Trp 75 70 Val Phe Val Tyr Leu Cys Tyr Tyr Ser Pro Leu Ala Leu Phe 85 <210> 4465 <211> 197 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (97) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (124) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (129) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4465 Arg Trp Ala Arg Val Glu Ala Ala Val Met Glu Gly Ala Gly Ala Gly Ser Gly Phe Arg Lys Glu Leu Val Ser Arg Leu Leu His Leu His Phe 20 25 Lys Asp Asp Lys Thr Lys Val Ser Gly Asp Ala Leu Gln Leu Met Val 40 Glu Leu Leu Lys Val Phe Val Val Glu Ala Ala Val Arg Gly Val Arg 60 Gln Ala Gln Ala Glu Asp Ala Leu Arg Val Asp Val Asp Gln Leu Glu 75 65 70

Lys Val Leu Arg Ser Cys Ser Gly Leu Leu Gly Ile Ser Ala Val Ala

85

90

95

4048

Xaa Ala Thr Pro Arg Gly Ala Pro Gly Pro Gln Lys Gln Ala Leu Cys 100 105 110

Phe Gln Arg Pro Leu Ile Arg Gly Arg Glu Gly Xaa Glu Gly Phe Gly
115 120 125

Xaa Asp Ser Asn Lys Ile Ser Gly Ser Leu Gln Pro Val Gln Lys Gly
130 135 140

Gln Asp Cys Ser Ala Leu Arg Ala Leu Glu Cys Pro Val Gly Thr Leu 145 150 155 160

Val Trp Glu Gly Ala Ala Pro Gly Glu Ser Leu Pro Leu Leu Pro Gly
165 170 175

Thr Ile Val Cys Met Pro Pro Gly Val Leu Gln Ala Gly Ala Gly Lys 180 185 190

Gly Leu Ala Ser Arg 195

<210> 4466

<211> 98

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4466

Lys Ala Trp Ser Ala Phe Arg Gly Ile Arg Arg Lys His Arg Lys Ser 1 5 10 15

Leu Leu Ser Arg Ser Trp Ala Pro Leu Pro Leu Gly Gln Arg Thr Gly 20 25 30

Asn Arg Gly Ser Gly Ile Ser Gly Pro Ala Arg Glu Arg Ser Ser Arg 35 40 45

Ala Arg Ser Cys Pro Ala Asn His Ala Ala Pro Trp Ala Glu Ala Ala 50 55 60

Pro Ala Met Ala Leu Gly Pro Ala Pro Ala Gln Gly Xaa Leu Ser Pro 65 70 75 80

Ala Cys Trp Ala Pro Pro Trp Tyr Ile Ala Ser Ser Arg Thr Gln Ile

4049

85 90 95

Thr Pro

<210> 4467

<211> 47

<212> PRT

<213> Homo sapiens

<400> 4467

Gly Leu Pro His Arg Ile Ile Met His Ser Pro Leu Leu Met His Val 1 5 10 15

Lys Phe Leu Leu Gly Lys Leu Thr His His Leu Thr Thr Ile Leu Ser 20 25 30

Thr Ile Glu Tyr Ile Leu Phe His Lys Phe Gly Ile His Ser Glu 35 40 45

<210> 4468

<211> 70

<212> PRT

<213> Homo sapiens

<220>

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<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (66)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4468

Phe Thr Asn Ala Phe Gly Gln Leu Asp Val Thr Asp Phe Ile Leu Cys

1 5 10 15

Asp Tyr Asn Lys Lys His Asn Phe Leu Lys Lys Lys Lys Lys Lys Lys 20 25 30

4050

Lys Lys Gly Gly Arg Ser Arg Gly Ser Lys Leu Thr Tyr Ala Cys Met 40 35 Arg Arg His Ser Ser Ser Ile Xaa Ser Pro Lys Phe Asn Ser Leu Ala 55 Arg Xaa Phe Thr Thr Xaa 65 <210> 4469 <211> 74 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4469 Trp Xaa Tyr Arg Ile Leu Asn Arg Ile Gln Phe Asp Met Thr Ala Lys 5 Asn Val Gly Leu Thr Ser Thr Asn Ala Glu Val Arg Gly Phe Ile Asp 20 25 Gln Asn Leu Ser Pro Thr Lys Gly Asn Ile Ser Phe Val Ala Phe Pro 35 40 Val Ser Asn Thr Asn Ser Pro Thr Lys Ile Leu Pro Lys Thr Leu Gly 55 Pro Ile Asn Val Asn Val Gly Pro Gln Met 65 70 <210> 4470 <211> 178 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (28) <223> Xaa equals any of the naturally occurring L-amino acids <220>

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4051

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (170)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4470

Leu Pro Leu Tyr Thr Gly Ser Ser Arg Gly Glu His Ala Pro Pro Pro 1 5 10 15

Trp Ser Pro Pro Arg Ala Val Asn Leu Gly Ser Xaa Ser Arg Ala Val 20 25 30

Thr Leu Pro Glu Ala Pro Pro Pro Arg Arg Pro Gly Ala Val Asn 35 40 45

Pro Ser Leu Ala Ala Ala Glu Ser Ala Pro Gly Gln Ala His Leu Arg 50 55 60

Ile Asn Ala Leu Met Ala Ser Pro Arg Arg Glu Ser Leu Gly Met Val 65 70 75 80

Phe Ser Thr Val Lys Thr Phe Glu Pro Pro Glu Arg Leu Thr Pro Ala 85 90 95

Pro Leu Arg Gly His Phe Ile Gln Lys Leu Asn His Ser Glu Phe Gln
100 105 110

His Cys Arg Gly Ser Ser Gly Ser Val His Arg His Ser Leu Ala Leu 115 120 125

Ser Pro Thr Glu Pro Xaa Arg Asp Leu Gly Pro Ser Trp Gly Leu Phe 130 135 140

Ala Gly Gly Leu Gly Arg Trp Gln Trp Xaa Val Ser Ala His Gly Cys 165 170 175

Gly Trp

<210> 4471

<211> 107

<212> PRT

<213> Homo sapiens

4052

<400> 4471
Leu Arg Trp Lys Gly Arg Tyr Ser Glu Asn A

Leu Arg Trp Lys Gly Arg Tyr Ser Glu Asn Asp Val Lys Asn Trp Thr
1 5 10 15

Pro Glu Leu Gln Lys Tyr Leu Asn Phe Asp Pro Arg Thr Ala Gln Lys
20 25 30

Ile Asp Asn Gly Ile Phe Trp Ile Ser Trp Asp Asp Leu Cys Gln Tyr 35 40 45

Tyr Asp Val Ile Tyr Leu Ser Trp Asn Pro Gly Leu Phe Lys Glu Ser 50 55 60

Thr Cys Ile His Ser Thr Trp Asp Ala Lys Gln Gly Pro Val Lys Asp 65 70 75 80

Ala Tyr Ser Leu Ala Asn Asn Pro Gln Tyr Lys Leu Glu Val Gln Cys 85 90 95

Thr Thr Gly Gly Cys Cys Ser Leu Gly Phe Ala 100 105

<210> 4472

<211> 129

<212> PRT

<213> Homo sapiens

<400> 4472

Ala Trp Ala Asp Ala Trp Gly Glu Phe Ser Ala Leu Arg Ala Glu Asn 1 5 10 15

Glu Lys Ile Lys Leu Glu Leu His Gln Leu Lys Gln Gln Val Met Asp 20 25 30

Glu Val Ile Lys Val Arg Thr Asp Thr Lys Leu Asp Phe Asn Leu Glu 35 40 45

Lys Ser Arg Val Lys Glu Leu Tyr Ser Leu Asn Glu Lys Lys Leu Leu 50 55 60

Glu Leu Arg Thr Glu Ile Val Ala Leu His Ala Gln Gln Asp Arg Ala 65 70 75 80

Leu Thr Gln Thr Asp Arg Lys Ile Glu Thr Glu Val Ala Gly Leu Lys
85 90 95

Thr Met Leu Glu Ser His Lys Leu Asp Asn Ile Lys Tyr Leu Ala Gly
100 105 110

4053

Ser Ile Phe Thr Cys Leu Thr Val Ala Leu Gly Phe Tyr Arg Leu Trp 115 120 125

Ile

<210> 4473

<211> 34

<212> PRT

<213> Homo sapiens

<400> 4473

Ala Cys Ser Asn Ala Cys Lys Thr Thr Tyr His Ser Ala Leu Val Phe 1 5 10 15

Leu Ile Gln Glu Gly Arg Ala Val Asn Leu Phe Gly Ala Asn Val Lys
20 25 30

Cys Lys

<210> 4474

<211> 90

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (23)

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<400> 4474

Thr Tyr Tyr Gln Asn Phe Phe Lys Glu Phe Phe Met Lys Asp Phe Pro 1 5 10 15

Pro Leu Gln Glu Arg Asn Xaa Val Leu Pro Phe Cys Leu Val Lys Ala 20 25 30

Glu Phe Ala Val Ala Ser Lys Glu Thr Phe Leu Asn Lys Asn Tyr Val 35 40 45

Leu Trp His Asn Pro Phe Phe Glu Leu Tyr Arg Glu Gln Ser Phe Gly 50 55 60

Asn Ser Gly Arg Tyr Leu Phe Leu Leu Asn Ile Tyr Pro Ile Ile Gly 65 70 75 80

4054

Ile Thr Val Thr Tyr Leu Gly Phe His His 85 90

<210> 4475

<211> 43

<212> PRT

<213> Homo sapiens

<400> 4475

Phe Lys Tyr Val Lys Cys Gly Ser Phe Thr Pro His His Ser Glu His 1 5 10 15

Thr Gly Glu Met Cys Phe Phe Gly Lys Leu Lys Gly Ala Ser Ser Leu 20 25 30

Ile Gln Arg Asn Ile Ser His Val Cys Ser Phe 35 40

<210> 4476

<211> 104

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4476

Ser Trp Arg Ser Asn Asn Ser Arg Lys Ser Ser Ala Asp Thr Glu Phe 1 5 10 15

Ser Asp Glu Cys Thr Thr Ala Glu Arg Val Leu Met Lys Ser Pro Ser 20 25 30

Pro Ala Leu His Pro Pro Gln Lys Tyr Lys Asp Arg Gly Ile Leu His 35 40 45

Pro Lys Arg Gly Thr Glu Asp Arg Ser Asp Gln Ser Ser Leu Lys Ser 50 55 60

Thr Asp Ser Ser Ser Tyr Pro Ser Pro Cys Ala Ser Pro Ser Pro Pro 65 70 75 80

Ser Ser Gly Lys Gly Leu Lys Ile Ser Phe Xaa Lys Thr Lys His Ala 85 90 95

4055

Cys Ser Ile Leu His Asn Glu Glu 100

<210> 4477

<211> 87

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (50)

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<400> 4477

Thr Val Val Glu Val Tyr Val Phe Val Tyr Leu Pro Ala Phe Glu Asn 1 5 10 15

Gly Gln Ile Asp Lys Leu Ser Leu Thr Asp Leu Gly Ala Leu Trp Ala 20 25 30

Gly Ile Lys Thr Glu Gly Gly Leu Ser Gln Ser Gln Ser Pro Gly Gln
35 40 45

Thr Xaa Phe Leu Ser Tyr Gly Thr Ser Phe Ser Thr Pro Gln Pro Gly 50 55 60

Gln Ala Pro Tyr Ser Tyr Gln Met Gln Gly Leu Tyr Ile His Ile Ala 65 70 75 80

Ile Phe Leu Asn Pro Val Gly 85

<210> 4478

<211> 104

<212> PRT

<213> Homo sapiens

<400> 4478

Leu Gln Arg Arg Arg Glu Gln Lys Gln Arg Arg His Asp Ala Gln Gln 1 5 10 15

Leu Gln Gln Leu Lys His Leu Glu Ser Phe Tyr Glu Lys Pro Pro Pro 20 25 30

Gly Leu Ile Lys Glu Asp Glu Thr Lys Pro Glu Asp Cys Ile Pro Asp 35 40 45

4056

Val Pro Gly Asn Glu His Ala Arg Glu Phe Leu Ala His Ala Pro Thr 50 55 Lys Gly Leu Trp Met Pro Leu Gly Lys Glu Val Lys Val Met Gln Cys Trp Arg Cys Lys Pro Met Val Thr Glu Arg Val Thr Lys Asn Ala Leu 85 90 Ser Leu Ser Lys Ala Thr Lys Ser 100 <210> 4479 <211> 126 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (59) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (63) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (99) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (102) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4479 Leu Val Lys Cys Asn Tyr Cys Asn Phe Phe Pro Ile Gln Leu Tyr Ile Ser Leu Thr Asp Asp Gln Ile Ile Val Val Leu Asn Gln Phe Val Val 25 20 Ser Lys Cys Phe Val Gly Phe Cys Leu Phe Val Phe Lys Glu Gln Phe 40 Gly Ser Leu Asp Met Val Leu Gln Arg Asp Xaa Met Gly Cys Xaa Trp

4057

50 55 60

Phe Trp Val Ile Thr Asp Leu Leu Asp Asn Leu Asp Lys Gln Pro Ser 65 70 75 80

Cys His Val Cys Leu Ser Asn Leu Lys Cys Ser Leu Tyr Phe Met Phe 85 90 95

Leu Glu Xaa Leu Ser Xaa Lys Asp Leu Thr Leu Trp Gln Ile Cys Leu 100 105 110

Asn Arg Asp Thr Thr Met Leu Pro Asn Lys Ala Phe Trp Pro 115 120 125

<210> 4480

<211> 70

<212> PRT

<213> Homo sapiens

<400> 4480

Val Thr Asn Leu Val Ile Ile Phe Phe Leu Ile Gln Pro Gln Lys Leu 1 5 10 15

Ala Ile Leu Lys Arg Leu Met Phe Thr Asn Gly Lys Asn Glu Met Thr 20 25 30

Leu His Leu Leu Arg Glu Asn Ser Leu Arg His Ser Leu Ser Lys Leu 35 40 45

Tyr Phe Phe Tyr Leu Ile Leu Lys Thr Ser Ala Pro Lys Ser Val Ser 50 55 60

Ile Phe Pro Glu Cys Leu 65 70

<210> 4481

<211> 41

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

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<220>

<221> SITE

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Glu Leu Arg Gln Phe Ser Xaa Met Asn Arg Tyr Asn Leu Lys Pro Asn
                                     10
Gln Thr Arg Lys Leu Arg Gly His Arg Met Pro Val Leu Gly Trp Ala
Thr Pro Leu Leu Phe Val Lys Met Xaa
<210> 4482
<211> 53
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (5)
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<400> 4482
Asn Leu Asn Gly Xaa Leu Ile Phe Pro Leu Cys Pro Leu Val Pro Cys
Lys Met Leu Gly His Pro Lys Glu Arg Gly Glu Ile Ala Met Val Val
             20
                                 25
Pro Lys Val Leu Leu Ala Leu His Val Phe Leu Lys Ser Arg Thr Trp
         35
                             40
Ser Phe Ser Phe Met
     50
<210> 4483
<211> 80
<212> PRT
<213> Homo sapiens
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4059

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<222> (60)
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<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (78)
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<220>
<221> SITE
<222> (80)
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Cys Arg Gln Glu Arg Ala Val Ala Pro Ala Arg Arg Ala Met Glu Arg
                  5
Ile Pro Ser Ala Gln Pro Pro Pro Ala Cys Leu Pro Lys Ala Pro Gly
                                 25
Leu Glu His Gly Asp Leu Pro Gly Met Tyr Pro Ala His Met Tyr Gln
                             40
Val Tyr Lys Ser Arg Arg Gly Ile Lys Arg Xaa Xaa Asp Ser Lys Glu
     50
Thr Tyr Lys Leu Pro Xaa Arg Xaa Ile Glu Lys Arg Asp Xaa Thr Xaa
                     70
                                          75
                                                              80
 65
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<210> 4484
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<220>

<211> 155

<212> PRT

<213> Homo sapiens

4060

<221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (106) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4484 Ser Phe Gln Glu Met Val Thr Ile Arg Arg Ile Ile Gln Ser Gln 10 15 5 Lys Arg Arg Arg Val Lys Thr Leu Pro Gly Asp Gly Lys Gly Asn Lys 20 25 His Lys Lys His Arg Lys Arg Arg Lys Glu Glu Ser Glu Gly Phe 40 Leu Asn Pro Glu Leu Leu Glu Thr Ser Arg Lys Ser Arg Glu Pro Thr 55 60 Xaa Val Glu Glu Asn Lys Thr Asp Ser Leu Phe Val Leu Pro Ser Arg 70 75 65 Asp Asp Ala Thr Pro Val Arg Asp Glu Pro Met Asp Ala Glu Ser Xaa Thr Phe Lys Ser Val Ser Glu Lys Asp Xaa Arg Glu Arg Asp Lys Pro 100 105 Lys Ala Lys Gly Asp Lys Thr Lys Arg Lys Asn Asp Gly Ser Ala Val 120 115 Ser Lys Lys Glu Asn Ile Val Lys Pro Ala Lys Gly Pro Gln Glu Lys 130 135 Val Asp Gly Glu Arg Glu Arg Ser Pro Ser Ile 150

<210> 4485

<211> 71

<212> PRT

<213> Homo sapiens

4061

<400> 4485

Pro Pro Arg Arg Gly Leu Gly Gly Thr Ser Ser Arg Ser Pro Gly Pro 1 5 10 15

Arg Phe Cys Gly Arg Val His Cys Arg Gly Gly Asp Gly Val Arg Ala
20 25 30

Arg Arg Gln Leu Pro Pro Arg Ser Ser Gly Pro Thr Trp Gln Ser Ala 35 40 45

Ala His Gly Ser Pro Ala Ser Glu Asp Pro Trp Leu Gln Pro Pro Ile 50 55 60

Pro Thr Cys Arg Arg Thr Arg 65 70

<210> 4486

<211> 54

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4486

Asp Ile Asp Leu Asp Met Arg Phe Phe Ser Phe Ile Leu Ser Cys Arg
1 5 10 15

Arg Asn Xaa Ser Ser Ile Cys Thr Arg Xaa Lys Thr Thr Tyr Thr Asn 20 25 30

Thr Ile Glu Gln Leu Ile Met Lys Thr Leu Pro Ala Phe Ile Lys Asn 35 40 45

Val Ile Ile Phe Phe Cys
50

<210> 4487

<211> 33

4062

<212> PRT

<213> Homo sapiens

<400> 4487

Gln Cys Ser Glu Ile Cys Gly Ala Asn His Ser Phe Met Pro Ile Val 1 5 10 15

Leu Glu Leu Ile Pro Leu Lys Ile Phe Glu Ile Gly Pro Val Phe Thr 20 25 30

Leu

<210> 4488

<211> 186

<212> PRT

<213> Homo sapiens

<400> 4488

Ala Val Pro Lys Asp Val Ser Ser Glu Glu Ala Gly Gln Val Glu Gly 1 5 10 15

Val Ser Thr Met Val Ile Asp Gly Glu Gly Asp Ala Ala Gln Val Glu 20 25 30

Arg Phe Val His Leu Pro Gly Val Gln Glu Trp Val Gly Gly Thr Thr
35 40 45

Gln Ser Ile Leu Tyr Leu Ala His Thr Cys Trp Tyr Trp Ser Trp Leu 50 60

Ala Phe Pro Cys Ala Thr Arg Arg Ser Cys Thr Val Leu Ser Ser Gln 65 70 75 80

Leu Thr Ser Ala Lys Met Ser Gly Phe Ser Ser Glu Leu Leu Cys Glu 85 90 95

Ala Thr Arg Met Glu Val Ile Ser Ala Ser Val Leu Ile Leu Glu Val 100 105 110

Glu Lys Trp Ser Glu Ser Ser Val Val Lys Trp Pro Tyr Thr Lys Val
115 120 125

Gly Asp Ile Gln Asn Arg Gly Glu Ile Gly Leu Ser Ala Pro Leu Gly 130 135 140

Gly Arg Glu Ala Val Gly Val Gly Glu Met Ala Leu Cys Glu Cys 145 150 155 160

4063

Gly Arg Pro Ala Asp Trp Arg Trp Asn Trp Pro Gln Cys Leu Ser Trp 165 170 175

Arg Trp Arg Ser Gly Gln Ser Pro Trp Trp 180 185

<210> 4489

<211> 134

<212> PRT

<213> Homo sapiens

<400> 4489

Pro Val Pro Phe Pro Thr Phe Ala Leu Pro Val Val Gly Met Trp Glu
1 5 10 15

Ala His Leu Ser Ser Cys Asp Phe Met Ser Gln Thr Lys Asp Glu Arg
20 25 30

Leu Val Ser Ala Met Met Val Val Ser Glu Ala Phe Pro Cys Pro Val 35 40 45

Trp Cys Leu Pro His Ile Val Pro Asp Thr Gly Phe Leu Asp Pro Leu 50 55 60

Leu Leu Ser Phe Leu Ser Phe Arg Ser Arg Ser Pro Val Leu Tyr Pro 65 70 75 80

Ala Pro Gln Lys Pro Gln Cys Phe Ser Ser Ala Gly Leu Gly His Lys 85 90 95

Glu Ala Leu Gly Tyr Gly Glu Arg Leu Leu Pro Arg Val Tyr Ser 100 105 110

Gln Ala Arg Gly Leu Pro Ser Ser Ser Gln Thr Ser Leu Lys Gly Ser 115 120 125

Pro Phe Gly Ala Gly Arg 130

<210> 4490

<211> 58

<212> PRT

<213> Homo sapiens

<400> 4490

Glu Phe Gly Thr Arg Gln Trp Cys Asp Leu Ser Ser Leu Gln Pro Pro 1 5 10 15

4064

Arg Leu Gly Phe Met Gln Leu Ser Cys Leu Ser Leu Pro Ser Ser Trp
20 25 30

Asp Tyr Arg His Val Pro Pro Cys Pro Ala Asn Phe Cys Ile Phe Ser 35 40 45

Arg Asp Gly Val Ser Leu Cys Trp Ser Gly 50 55

<210> 4491

<211> 25

<212> PRT

<213> Homo sapiens

<400> 4491

Arg Ala Pro Val Ile Pro Ala Thr Gln Glu Ala Glu Ala Gly Glu Trp

1 5 10 15

Arg Glu Pro Gly Arg Arg Ser Leu Gln
20 25

<210> 4492

<211> 351

<212> PRT

<213> Homo sapiens

<400> 4492

Glu Pro Pro Pro Pro Ala Ile Arg His His Leu Pro Leu Leu Gln Leu
1 5 10 15

Phe Ser Gln Asp Gln Pro Leu Ala Gln Pro Arg Ala Met Ala Tyr Val\$20\$ \$25\$ 30

Pro Ala Pro Gly Tyr Gln Pro Thr Tyr Asn Pro Thr Leu Pro Tyr Tyr
35 40 45

Gln Pro Ile Pro Gly Gly Leu Asn Val Gly Met Ser Val Tyr Ile Gln 50 55 60

Gly Val Val Ser Glu His Met Lys Arg Phe Phe Val Asn Phe Val Val 65 70 75 80

Gly Gln Asp Pro Gly Ser Asp Val Ala Phe His Phe Asn Pro Arg Phe 85 90 95

Asp Gly Trp Asp Lys Val Val Phe Asn Thr Leu Gln Gly Gly Lys Trp

4065

110 105 100 Gly Ser Glu Glu Arg Lys Arg Ser Met Pro Phe Lys Lys Gly Ala Ala 120 Phe Glu Leu Val Phe Ile Val Leu Ala Glu His Tyr Lys Val Val Val 135 Asn Gly Asn Pro Phe Tyr Glu Tyr Gly His Arg Leu Pro Leu Gln Met 150 155 145 Val Thr His Leu Gln Val Asp Gly Asp Leu Gln Leu Gln Ser Ile Asn 165 170 Phe Ile Gly Gly Gln Pro Leu Arg Pro Gln Gly Pro Pro Met Met Pro · 185 Pro Tyr Pro Gly Pro Gly His Cys His Gln Gln Leu Asn Ser Leu Pro 200 Thr Met Glu Gly Pro Pro Thr Phe Asn Pro Pro Val Pro Tyr Phe Gly 215 210 Arg Leu Gln Gly Gly Leu Thr Ala Arg Arg Thr Ile Ile Ile Lys Gly 230 225 Tyr Val Pro Pro Thr Gly Lys Ser Phe Ala Ile Asn Phe Lys Val Gly 250 Ser Ser Gly Asp Ile Ala Leu His Ile Asn Pro Arg Met Gly Asn Gly 265 260 Thr Val Val Arg Asn Ser Leu Leu Asn Gly Ser Trp Gly Ser Glu Glu 275 280 Lys Lys Ile Thr His Asn Pro Phe Gly Pro Gly Gln Phe Phe Asp Leu 295 Ser Ile Arg Cys Gly Leu Asp Arg Phe Lys Val Tyr Ala Asn Gly Gln 310 315 His Leu Phe Asp Phe Ala His Arg Leu Ser Ala Phe Gln Arg Val Asp 325 Thr Leu Glu Ile Gln Gly Asp Val Thr Leu Ser Tyr Val Gln Ile 340 345 350

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<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4493
Val Asn Glu Cys Gln Gly Arg Gln Ala Pro Ala Pro Arg Ala Leu Gly
                                  10
Val Ala Arg Gly Cys Leu Ala Arg Thr Pro Cys Thr Tyr Phe Pro Gly
            20
Ala Gln His Gly Asn Lys Ala Pro Xaa Xaa Ala Leu Gly Pro Cys Glu
55
Lys Lys Lys Lys Lys Lys Lys Lys Lys Gly Gly Arg Xaa Lys
                   70
                                      75
Arg Phe Pro
<210> 4494
<211> 91
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4494
Pro Gln Arg Ala Arg Ala Gly Ala Arg Xaa Pro Ser Met Gly Val Leu
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4067

10 1 5 Leu Thr Gln Arg Thr Leu Leu Ser Leu Val Leu Ala Leu Leu Phe Pro 25 Ser Met Ala Ser Met Ala Ala Ile Gly Ser Cys Ser Lys Glu Tyr Arg 40 Val Leu Gly Gln Leu Gln Lys Gln Thr Asp Leu Met Gln Asp Thr 50 55 Ser Arg Leu Leu Asp Pro Tyr Val Ser Thr Trp Ala Leu Val Ala Ser 70 75 Glu Ser Gln Arg Thr Met Gly Leu Gly Arg Glu 85 <210> 4495 <211> 36 <212> PRT <213> Homo sapiens <400> 4495 Ala Pro Val Val Ala Ala Thr Arg Glu Ala Glu Ala Gly Glu Ser Leu 10 Glu Pro Val Gly Ala Glu Val Ala Val Ser Gln Asp Arg Ala Thr Ala 25 Leu Gln Pro Gly 35 <210> 4496 <211> 50 <212> PRT <213> Homo sapiens <400> 4496 Leu Pro His Pro Lys Phe Tyr Gly Arg Leu Met Phe Cys Tyr Gly Asp 10 Tyr His Pro Ser Thr Trp Lys His Gln Asn Gly Leu Val Gln Leu Gly

25

Ser Ser Ala Arg Ser Arg Cys Leu Leu Phe Glu Ile Val Trp Lys Asp

40

4068

Tyr Cys 50

<210> 4497

<211> 75

<212> PRT

<213> Homo sapiens

<400> 4497

Gln Val Asn Glu Val His Ile Trp Lys Ser Leu Asn Ile Phe Arg Ser 1 5 10 15

Trp Asn Ser Met Ala Thr Leu Val Val Tyr Ala Phe His Cys Cys Gly 20 25 30

Arg Gly Phe Gly Ser Lys Cys His Gln Gln Trp Ile Gln Lys Thr Trp 35 40 45

Ile Trp Asn Lys Gly Lys Ile Tyr Leu Met Gly Leu Asn Cys Ser Ala
50 55 60

Arg Ser Ile Trp Tyr Glu Met Lys Trp Leu Ser 65 70 75

<210> 4498

<211> 444

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4498

Asn Glu Gln Asp Asn Cys Val Leu Ile His Asp Val Asp Gln Arg Asn 1 5 10 15

Ser Asp Lys Asp Ile Phe Gly Asp Ala Cys Asp Asn Cys Leu Ser Val 20 25 30

Leu Xaa Asn Asp Gln Lys Asp Thr Asp Gly Asp Gly Asp Gly Asp Ala 35 40 45

Cys Asp Asp Met Asp Gly Asp Gly Ile Lys Asn Ile Leu Asp Asn 50 55 60

Суs 65	Pro	Lys	Phe	Pro	Asn 70	Arg	Asp	Gln	Arg	Asp 75	Lys	Asp	Gly	Asp	Gly 80
Val	Gly	Asp	Ala	Cys 85	Asp	Ser	Суз	Pro	Asp 90	Val	Ser	Asn	Pro	Asn 95	Gln
Ser	Asp	Val	Asp 100	Asn	Asp	Leu	Val	Gly 105	Asp	Ser	Cys	Asp	Thr 110	Asn	Gln
Asp	Ser	Asp 115	G1y	Asp	Gly	His	Gln 120	Asp	Ser	Thr	Asp	Asn 125	Сув	Pro	Thr
Val	Ile 130	Asn	Ser	Ala	Gln	Leu 135	Asp	Thr	Asp	Lys	Asp 140	Gly	Ile	Gly	Asp
Glu 145	Cys	Asp	Asp	Asp	Asp 150	Asp	Asn	Asp	Gly	Ile 155	Pro	Asp	Leu	Val	Pro 160
Pro	Gly	Pro	Asp	Asn 165	Суѕ	Arg	Leu	Val	Pro 170	Asn	Pro	Ala	Gln	Glu 175	Asp
Ser	Asn	Ser	Asp 180	Gly	Val	Gly	Asp	Ile 185	Cys	Glu	Ser	Asp	Phe 190	Asp	Gln
Asp	Gln	Val 195	Ile	Asp	Arg	Ile	Asp 200	Val	Cys	Pro	Glu	Asn 205	Ala	Glu	Val
Thr	Leu 210	Thr	Asp	Phe	Arg	Ala 215	Tyr	Gln	Thr	Val	Val 220	Leu	Asp	Pro	Glu
Gly 225	Asp	Ala	Gln	Ile	Asp 230	Pro	Asn	Trp	Val	Val 235	Leu	Asn	Gln	Gly	Met 240
Glu	Ile	Val	Gln	Thr 245	Met	Asn	Ser	Asp	Pro 250	Gly	Leu	Ala	Val	Gly 255	Tyr
Thr	Ala	Phe	Asn 260	Gly	Val	Asp	Phe	Glu 265	Gly	Thr	Phe	His	Val 270	Asn	Thr
Gln	Thr	Asp 275	Asp	Asp	Tyr	Ala	Gly 280	Phe	Ile	Phe	Gly	Туr 285	Gln	Asp	Ser
Ser	Ser 290	Phe	Tyr	Val	Val	Met 295	Trp	Lys	Gln	Thr	Glu 300	Gln	Thr	Tyr	Trp
Gln 305	Ala	Thr	Pro	Phe	Arg 310	Ala	Val	Ala	Glu	Pro 315	Gly	Ile	Gln	Leu	Lys 320
Ala	Val	Lys	Ser	Lys 325	Thr	Gly	Pro	Gly	Glu 330		Leu	Arg	Asn	Ser 335	Leu

4070

Trp His Thr Gly Asp Thr Ser Asp Gln Val Arg Leu Leu Trp Lys Asp 340 345 350

Ser Arg Asn Val Gly Trp Lys Asp Lys Val Ser Tyr Arg Trp Phe Leu 355 360 365

Gln His Arg Pro Gln Val Gly Tyr Ile Arg Val Arg Phe Tyr Glu Gly 370 375 380

Ser Glu Leu Val Ala Asp Ser Gly Val Thr Ile Asp Thr Thr Met Arg 385 390 395 400

Gly Gly Arg Leu Gly Val Phe Cys Phe Ser Gln Glu Asn Ile Ile Trp 405 410 415

Ser Asn Leu Lys Tyr Arg Cys Asn Asp Thr Ile Pro Glu Asp Phe Gln 420 425 430

Glu Phe Gln Thr Gln Asn Phe Asp Arg Phe Asp Asn 435 440

<210> 4499

<211> 358

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (234)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4499

Leu Pro Gln Val Met Ala Glu Phe Arg Asn Asn Pro Gly Glu Val Glu
1 5 10 15

Gly Arg Lys Ala Lys Ser Met Lys Gly Gln Thr Thr Gly Lys Asn Gln
20 25 30

Asp Asn Pro Val Ile Asp Glu Ile Asp Phe Leu Glu Ala Phe Lys Asn 35 40 45

Ile Gln Pro Ser Ser Phe Arg Ser Val Ile Gly Leu Met Asp Ile Lys 50 55 60

Pro Val Asp Trp Glu Glu Ile Gly Gly Leu Glu Asp Val Lys Leu Lys 65 70 75 80

Leu Lys Gln Ser Ile Glu Trp Pro Leu Lys Phe Pro Trp Glu Phe Val 85 90 95

Arg	Met	Gly	Leu 100	Thr	Gln	Pro	Lys	Gly 105	Val	Leu	Leu	Tyr	Gly 110	Pro	Pro
Gly	Cys	Ala 115	Lys	Thr	Thr	Leu	Val 120	Arg	Ala	Leu	Ala	Thr 125	Ser	Cys	His
Cys	Ser 130	Phe	Val	Ser	Val	Ser 135	Gly	Ala	Asp	Leu	Phe 140	Ser	Pro	Phe	Val
Gly 145	Asp	Ser	Glu	Lys	Val 150	Leu	Ser	Gln	Ile	Phe 155	Arg	Gln	Ala	Arg	Ala 160
Ser	Thr	Pro	Ala	Ile 165	Leu	Phe	Leu	Asp	Glu 170	Ile	Asp	Ser	Ile	Leu 175	Gly
Ala	Arg	Ser	Ala 180	Ser	Lys	Thr	Gly	Cys 185	Asp	Val	Gln	Glu	Arg 190	Val	Leu
Ser	Val	Leu 195	Leu	Asn	Glu	Leu	Asp 200	Gly	Val	Gly	Leu	Lys 205	Thr	Ile	Glu
Arg	Arg 210	Gly	Ser	Lys	Ser	Ser 215	Gln	Gln	Glu	Phe	Gln 220	Glu	Val	Phe	Asn
Arg 225	Ser	Val	Met	Ile	Ile 230	Ala	Ala	Thr	Xaa	Arg 235	Pro	Asp	Val	Leu	Asp 240
Thr	Ala	Leu	Leu	Arg 245	Pro	Gly	Arg	Leu	Asp 250	Lys	Ile	Ile	Tyr	Ile 255	Pro
Pro	Pro	Asp	His 260	Lys	Gly	Arg	Leu	Ser 265	Ile	Leu	Lys	Val	Cys 270	Thr	Lys
Thr	Met	Pro 275	Ile	Gly	Pro	Asp	Val 280	Ser	Leu	Glu	Asn	Leu 285	Ala	Ala	Glu
Thr	Суs 290	Phe	Phe	Ser	Gly	Ala 295	Asp	Leu	Arg	Asn	Leu 300	Сув	Thr	Glu	Ala
Ala 305	Leu	Leu	Ala	Leu	Gln 310	Glu	Asn	Gly	Leu	Asp 315	Ala	Thr	Thr	Val	Lys 320
Gln	Glu	His	Phe	Leu 325	Lys	Ser	Leu	Lys	Thr 330	Val	Lys	Pro	Ser	Leu 335	Ser
Cys	Lys	Asp	Leu 340	Ala	Leu	Tyr	Glu	Asn 345	Leu	Phe	Lys	Lys	Glu 350	Gly	Phe
Ser	Asn	Val 355	Glu	Gly	Ile										

<210)> 45	00													
<211	.> 44	16													
<212> PRT															
<213> Homo sapiens															
<400> 4500															
Asn 1	Ser	Ala	Gln	Val 5	Gly	Arg	Gly	Asp	Ala 10	Val	Leu	Lys	Thr	Trp 15	Ala
Pro	Ala	Gln	Cys 20	Leu	Cys	Ser	Arg	Met 25	Gly	Pro	Ala	Trp	Leu 30	Trp	Leu
Leu	Gly	Thr 35	Gly	Ile	Leu	Ala	Ser 40	Val	His	Cys	Gln	Pro 45	Leu	Leu	Ala
His	Gly 50	Asp	Lys	Ser	Leu	Gln 55	Gly	Pro	Gln	Pro	Pro 60	Arg	His	Gln	Leu
Ser 65	Glu	Pro	Ala	Pro	Ala 70	Tyr	His	Arg	Ile	Thr 75	Pro	Thr	Ile	Thr	Asn 80
Phe	Ala	Leu	Arg	Leu 85	Tyr	Lys	Glu	Leu	Ala 90	Ala	Asp	Ala	Pro	Gly 95	Asn
Ile	Phe	Phe	Ser 100	Pro	Val	Ser	Ile	Ser 105	Thr	Thr	Leu	Ala	Leu 110	Leu	Ser
Leu	Gly	Ala 115	Gln	Ala	Asn	Thr	Ser 120	Ala	Leu	Ile	Leu	Glu 125	Gly	Leu	Gly
Phe	Asn 130	Leu	Thr	Glu	Thr	Pro 135	Glu	Ala	Asp	Ile	His 140	Gln	Gly	Phe	Arg
Ser 145	Leu	Leu	His	Thr	Leu 150	Ala	Leu	Pro	Ser	Pro 155	Lys	Leu	Glu	Leu	Lys 160
Val	Gly	Asn	Ser	Leu 165	Phe	Leu	Asp	_	Arg 170		Lys	Pro	Arg	Gln 175	His
Tyr	Leu	Asp	Ser 180	Ile	Lys	Glu	Leu	Tyr 185	Gly	Ala	Phe	Ala	Phe 190	Ser	Ala
Asn	Phe	Thr 195	Asp	Ser	Val	Thr	Thr 200	Gly	Arg	Gln	Ile	Asn 205	Asp	Tyr	Leu
Arg	Arg 210	Gln	Thr	Tyr	Gly	Gln 215	Val	Val	Asp	Cys	Leu 220	Pro	Glu	Phe	Ser

4073

Gln Asp Thr Phe Met Val Leu Ala Asn Tyr Ile Phe Phe Lys Ala Lys 230 Trp Lys His Pro Phe Ser Arg Tyr Gln Thr Gln Lys Gln Glu Ser Phe 250 245 Phe Val Asp Glu Arg Thr Ser Leu Gln Val Pro Met Met His Gln Lys 265 260 Glu Met His Arg Phe Leu Tyr Asp Gln Asp Leu Ala Cys Thr Val Leu 280 Gln Ile Glu Tyr Arg Gly Asn Ala Leu Ala Leu Val Leu Pro Asp 295 Pro Gly Lys Met Lys Gln Val Glu Ala Ala Leu Gln Pro Gln Thr Leu 305 315 310 Arg Lys Trp Gly Gln Leu Leu Pro Ser Leu Leu Asp Leu His Leu 325 330 Pro Arg Phe Ser Ile Ser Gly Thr Tyr Asn Leu Glu Asp Ile Leu Pro 345 Gln Ile Gly Leu Thr Asn Ile Leu Asn Leu Glu Ala Asp Phe Ser Gly 360 365 Val Thr Gly Gln Leu Asn Lys Thr Ile Ser Lys Val Ser His Lys Ala 370 375 Met Val Asp Met Ser Glu Lys Gly Thr Glu Ala Gly Ala Ala Ser Gly 390 385 Leu Leu Ser Gln Pro Pro Ser Leu Asn Thr Met Ser Asp Pro His Ala 405 410 His Phe Asn Arg Pro Phe Leu Leu Leu Trp Glu Val Thr Thr Gln 420 425 Ser Leu Leu Phe Leu Gly Lys Val Val Asn Pro Val Ala Gly 440

<210> 4501

<211> 180

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

4074

<222> (6) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (15) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4501 Lys Ala Arg Pro Leu Xaa Leu Thr Lys Gly Asn Lys Xaa Trp Xaa Ser 10 Thr Ala Val Ala Ala Ala Leu Gln Leu Val Asp Pro Pro Gly Cys Arg 25 Asn Ser Ala Arg Glu Glu His Trp Pro Ser Gln Leu Leu Arg Glu 35 40 Ser Leu Glu Asp Met Met Leu His Ser Ala Leu Gly Leu Cys Leu Leu 55 Leu Val Thr Val Ser Ser Asn Leu Ala Ile Ala Ile Lys Lys Glu Lys Arg Pro Pro Gln Thr Leu Ser Arg Gly Trp Gly Asp Asp Ile Thr Trp 95 90 Val Gln Thr Tyr Glu Glu Gly Leu Phe Tyr Ala Gln Lys Ser Lys Lys 100 105 110 Pro Leu Met Val Ile His His Leu Glu Asp Cys Gln Tyr Ser Gln Ala Leu Lys Lys Val Phe Ala Gln Asn Glu Glu Ile Gln Glu Met Ala Gln 135 140 Asn Lys Phe Ile Met Leu Asn Leu Met His Glu Thr Thr Asp Lys Asn 145 150 155 160 Leu Ser Pro Asp Gly Gln Tyr Val Pro Arg Asn His Val Cys Arg Pro

170

175

Phe Phe Asn Ser 180

4075

<210> 4502 <211> 29 <212> PRT <213> Homo sapiens <400> 4502 Gly Gly Thr Ser Ser Leu Ser Thr Met Asn Gln Thr Ala Ile Leu Asn Leu Leu Pro Tyr Leu Ser Asp Ser Lys Trp His Ser Arg 25 <210> 4503 <211> 238 <212> PRT <213> Homo sapiens <400> 4503 Gln Asp Leu Lys Pro Val Leu Asp Arg Glu Tyr Leu Ala Ile Tyr Leu Lys Met Val Phe Phe Thr Cys Asn Ala Cys Gly Glu Ser Val Lys Lys 25 Ile Gln Val Glu Lys His Val Ser Val Cys Arg Asn Cys Glu Cys Leu 45 35 40 Ser Cys Ile Asp Cys Gly Lys Asp Phe Trp Gly Asp Asp Tyr Lys Asn His Val Lys Cys Ile Ser Glu Asp Gln Lys Tyr Gly Gly Lys Gly Tyr 70 75 Glu Gly Lys Thr His Lys Gly Asp Ile Lys Gln Gln Ala Trp Ile Gln 90 85 Lys Ile Ser Glu Leu Ile Lys Arg Pro Asn Val Ser Pro Lys Val Arg 100 Glu Leu Leu Glu Gln Ile Ser Ala Phe Asp Asn Val Pro Arg Lys Lys 120 Ala Lys Phe Gln Asn Trp Met Lys Asn Ser Leu Lys Val His Asn Glu 135 140

Ser Ile Leu Asp Gln Val Trp Asn Ile Phe Ser Glu Ala Ser Asn Ser

155

160

150

4076

Glu Pro Val Asn Lys Glu Gln Asp Gln Arg Pro Leu His Pro Val Ala 165 170 175

Asn Pro His Ala Glu Ile Ser Thr Lys Val Pro Ala Ser Lys Val Lys 180 185 190

Asp Ala Val Glu Gln Gln Gly Glu Val Lys Lys Asn Lys Arg Glu Arg 195 200 205

Lys Glu Glu Arg Gln Lys Lys Arg Lys Arg Glu Lys Lys Glu Leu Lys 210 215 220

Val Arg Lys Pro Pro Gly Lys Thr Pro Arg Asp Ser Glu Ala 225 230 235

<210> 4504

<211> 341

<212> PRT

<213> Homo sapiens

<400> 4504

Thr His Ala Ser Ala His Ala Ser Ala His Ala Ser Ala His Ala Ser 1 5 10 15

Gly Trp His Val Gly Gln Ala Gln Gln Gly Pro Val Ser Ala Leu Ser 20 25 30

Arg Ala Leu Pro Ala Pro Ala Arg Thr Met Arg Ala Leu Glu Gly Pro 35 40 45

Gly Leu Ser Leu Leu Cys Leu Val Leu Ala Leu Pro Ala Leu Leu Pro 50 55 60

Val Pro Ala Val Arg Gly Val Ala Glu Thr Pro Thr Tyr Pro Trp Arg 65 70 75 80

Asp Ala Glu Thr Gly Glu Arg Leu Val Cys Ala Gln Cys Pro Pro Gly 85 90 95

Thr Phe Val Gln Arg Pro Cys Arg Arg Asp Ser Pro Thr Thr Cys Gly
100 105 110

Pro Cys Pro Pro Arg His Tyr Thr Gln Phe Trp Asn Tyr Leu Glu Arg 115 120 125

Cys Arg Tyr Cys Asn Val Leu Cys Gly Glu Arg Glu Glu Glu Ala Arg 130 135 140

Ala Cys His Ala Thr His Asn Arg Ala Cys Arg Cys Arg Thr Gly Phe

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4077

160 150 155 145 Phe Ala His Ala Gly Phe Cys Leu Glu His Ala Ser Cys Pro Pro Gly 165 170 Ala Gly Val Ile Ala Pro Gly Thr Pro Ser Gln Asn Thr Gln Cys Gln 185 Pro Cys Pro Pro Gly Thr Phe Ser Ala Ser Ser Ser Ser Glu Gln 205 195 200 Cys Gln Pro His Arg Asn Cys Thr Ala Leu Gly Leu Ala Leu Asn Val 215 220 210 Pro Gly Ser Ser His Asp Thr Leu Cys Thr Ser Cys Thr Gly Phe 230 235 Pro Leu Ser Thr Arg Val Pro Gly Ala Glu Glu Cys Glu Arg Ala Val 250 Ile Asp Phe Val Ala Phe Gln Asp Ile Ser Ile Lys Arg Leu Gln Arg 265 270 260 Leu Leu Gln Ala Leu Glu Ala Pro Glu Gly Trp Gly Pro Thr Pro Arg 275 280 285 Ala Gly Arg Ala Ala Leu Gln Leu Lys Leu Arg Arg Leu Thr Glu 295 300 Leu Leu Gly Ala Gln Asp Gly Ala Leu Leu Val Arg Leu Leu Gln Ala 305 310 315 320 Leu Arg Val Ala Arg Met Pro Gly Leu Glu Arg Ser Val Arg Glu Arg 335 325 330 Phe Leu Pro Val His 340 <210> 4505

<211> 89

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

4078

<221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (85) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4505 Lys Gly Gly Gln Gly Ser Val Gly Glu Arg Gly Cys Leu Cys Ile Lys Thr Cys Phe Pro Ala Val Trp Arg Phe Leu Thr Glu Leu Lys Ile 25 Glu Leu Pro Phe Ile Pro Ala Ile Pro Leu Leu Gly Ile Tyr Ser Lys 40 Glu Asn Lys Leu Phe Tyr Gln Lys Asp Thr Cys Thr Pro Met Xaa Ile 55 Ala Ala Leu Phe Thr Ile Ala Lys Thr Trp Ser Lys Pro Arg Cys Pro 75 70 80 65 Ser Xaa Val Asn Xaa Ile Lys Lys Met 85 <210> 4506 <211> 75 <212> PRT <213> Homo sapiens <400> 4506 Ile Ser Thr Ser Ile His Thr Tyr Val Leu Val Phe His Tyr Cys Asn 15 5 10 Leu Lys Glu Arg Leu Cys Ile Pro Phe Phe Asn Ser Val Leu Val Phe 25 20 Val Leu Phe Lys Lys Gln Asn Ser Ala Leu Phe Ser Cys Ile Ile Leu Glu Asp Thr Leu Leu Cys Thr Ile Pro Ser Ala Leu Glu His Cys Leu 55 Ala Phe Leu Ser Ile Tyr Lys Cys Ile Tyr Val

70

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<210> 4507
<211> 26
<212> PRT
<213> Homo sapiens
<400> 4507
Val Thr Ala Gly Val Gln Thr Lys Thr Cys Thr Pro Met Phe Ile Ala
                                                          15
                  5
                                     10
Ala Leu Phe Thr Ala Ala Lys Arg Trp Lys
             20
<210> 4508
<211> 67
<212> PRT
<213> Homo sapiens
<400> 4508
Lys Gln Glu Thr Leu Ser Asp Leu Gly Ser Ser Tyr Ala Lys Gln Leu
                                                          15
                5
                                     10
Gly Phe Arg Asp Ser Trp Val Phe Ile Gly Ala Lys Asp Leu Arg Gly
                                 25
             20
Lys Ser Pro Phe Glu Gln Phe Leu Lys Asn Ser Pro Asp Thr Asn Lys
         35
                             40
Tyr Glu Gly Trp Pro Glu Leu Leu Glu Met Glu Gly Cys Met Pro Pro
                                              60
Lys Pro Phe
 65
<210> 4509
<211> 229
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4509
Ala Xaa Ala Pro Pro Gly Arg Ser Met Gly Arg Phe Arg Gly Gly Leu
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4080

1 5 10 15

Arg Cys Ile Lys Tyr Leu Leu Leu Gly Phe Asn Leu Leu Phe Trp Leu 20 25 30

Ala Gly Ser Ala Val Ile Ala Phe Gly Leu Trp Phe Arg Phe Gly Gly 35 40 45

Ala Ile Lys Glu Leu Ser Ser Glu Asp Lys Ser Pro Glu Tyr Phe Tyr 50 55 60

Val Gly Leu Tyr Val Leu Val Gly Ala Gly Ala Leu Met Met Ala Val 65 70 75 80

Gly Phe Phe Gly Cys Cys Gly Ala Met Arg Glu Ser Gln Cys Val Leu 85 90 95

Gly Ser Phe Phe Thr Cys Leu Leu Val Ile Phe Ala Ala Glu Val Thr 100 105 110

Thr Gly Val Phe Ala Phe Ile Gly Lys Gly Val Ala Ile Arg His Val 115 120 125

Gln Thr Met Tyr Glu Glu Ala Tyr Asn Asp Tyr Leu Lys Asp Arg Gly 130 135 140

Lys Gly Asn Gly Thr Leu Ile Thr Phe His Ser Thr Phe Gln Cys Cys 145 150 155 160

Gly Lys Glu Ser Ser Glu Gln Val Gln Pro Thr Cys Pro Lys Glu Leu 165 170 175

Leu Gly His Lys Asn Cys Ile Asp Glu Ile Glu Thr Ile Ile Ser Val 180 185 190

Lys Leu Gln Leu Ile Gly Ile Val Gly Ile Gly Ile Ala Gly Leu Thr
195 200 205

Ile Phe Gly Met Ile Phe Ser Met Val Leu Cys Cys Ala Ile Arg Asn 210 215 220

Ser Arg Asp Val Ile 225

<210> 4510

<211> 74

<212> PRT

<213> Homo sapiens

4081

<400> 4510 Ile Glu Cys Val Asn Thr Val Leu Val Asn Phe Ile Thr Phe Leu Leu Pro Tyr Ser Leu Asn Phe Ser Val Phe Val Val Pro Lys Gln Leu Leu 20 25 Asn Leu Glu Gln Ile Asn Leu Thr Pro Ala Lys Lys Arg Leu Leu Leu 40 Ala Tyr Gln Leu Ser Leu Asn Ser Asn Ala His Val Thr Phe Ile Thr 50 55 Ser Lys Asn Ile Ser Leu Met Ile His Leu 70 <210> 4511 <211> 41 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (29) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (31) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4511 Tyr Ile Gly Phe Val Ile Leu Val Phe Phe Ala Ser Ser Tyr Val Lys Glu Ile Asp Asn Lys Ile Leu Asn Asn Lys Lys Lys Xaa Lys Xaa Ser 25

Ser Lys Gly Xaa Val Ala Xaa Ala Ile

4082

35 40

<210> 4512 <211> 288 <212> PRT <213> Homo sapiens <400> 4512 Glu Ile Arg Val Ser Cys Thr Ala Gly Ala Gly Phe Pro Ala Ala Gln 5 Ala Arg Val Arg Cys Leu Cys His Leu Ile Leu Met Ser Gly Glu Ile 20 Ala Met Cys Glu Pro Glu Phe Gly Asn Asp Lys Ala Arg Glu Pro Ser Val Gly Gly Arg Trp Arg Val Ser Trp Tyr Glu Arg Phe Val Gln Pro 55 Cys Leu Val Glu Leu Leu Gly Ser Ala Leu Phe Ile Phe Ile Gly Cys 65 70 75 Leu Ser Val Ile Glu Asn Gly Thr Asp Thr Gly Leu Leu Gln Pro Ala 90 85 Leu Ala His Gly Leu Ala Leu Gly Leu Val Ile Ala Thr Leu Gly Asn 105 Ile Ser Gly Gly His Phe Asn Pro Ala Val Ser Leu Ala Ala Met Leu 120 125 Ile Gly Gly Leu Asn Leu Val Met Leu Leu Pro Tyr Trp Val Ser Gln 130 135 140 Leu Leu Gly Gly Met Leu Gly Ala Ala Leu Ala Lys Ala Val Ser Pro 150 155 Glu Glu Arg Phe Trp Asn Ala Ser Gly Ala Ala Phe Val Thr Val Gln 165 170 Glu Gln Gly Gln Val Ala Gly Ala Leu Val Ala Glu Ile Ile Leu Thr 180 185 Thr Leu Leu Ala Leu Ala Val Cys Met Gly Ala Ile Asn Glu Lys Thr Lys Gly Pro Leu Ala Pro Phe Ser Ile Gly Phe Ala Val Thr Val Asp 210 220 215

4083

Ile Leu Ala Gly Gly Pro Val Ser Gly Gly Cys Met Asn Pro Ala Arg 225 230 235 240

Ala Phe Gly Pro Ala Val Val Ala Asn His Trp Asn Phe His Trp Ile 245 250 255

Tyr Trp Leu Gly Pro Leu Leu Ala Gly Leu Leu Val Gly Leu Leu Ile 260 265 270

Arg Cys Phe Ile Gly Asp Gly Lys Thr Arg Leu Ile Leu Lys Ala Gln 275 280 285

<210> 4513

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4513

Ser Pro Pro Tyr Ala Arg Lys Thr Cys Ser Arg Ser Val Ala Lys Leu 1 5 10 15

Asn Arg Ala Ile Arg Ile His Gln Thr Leu Met Glu Ser Ala Ser Leu
20 25 30

Thr Tyr Glu Gln Arg Leu Leu Ala Ile Gln Gln Leu Gly Arg Asp Tyr 35 40 45

Met Ala Ala Gly Leu Tyr Asp Arg Ala Glu Asp Met Phe Asn Gln Leu 50 55 60

Thr Asp Glu Thr Asp Phe Arg Ile Gly Ala Leu Gln Gln Leu Leu Gln 65 70 75 80

Ile Tyr Gln Ala Thr Ser Glu Trp Gln Lys Ala Ile Asp Val Ala Glu 85 90 95

Arg Leu Val Lys Leu Gly Lys Asp Lys Gln Arg Val Glu Ile Ala His
100 105 110

Phe Tyr Cys Glu Leu Ala Leu Gln His Met Ala Leu Leu Gln Thr Lys
115 120 125

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<210> 4514
<211> 43
<212> PRT
<213> Homo sapiens
<220>
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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4514
Gly Lys Lys Ile Lys Lys Leu Ala Ser Ala Xaa Arg Gly Gly Ser Leu
                                     10
Pro Val Ile Pro Ala Leu Ser Ala Ala Glu Ala Ser Gly Ser Leu Glu
                                 25
Val Xaa Ser Ser Lys Thr Ser Leu Gly Gln Thr
<210> 4515
<211> 220
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (216)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4515
Asn Thr Pro Gly Phe Met Tyr Lys Asn Leu Gln Cys Leu Val Ile Asp
                                     10
Glu Ala Asp Arg Ile Phe Asp Val Gly Phe Glu Glu Glu Leu Lys Gln
             20
                                  25
Ile Ile Lys Leu Pro Thr Arg Arg Gln Thr Met Leu Phe Ser Ala
        35
                             40
Thr Gln Thr Arg Lys Val Glu Asp Leu Ala Arg Ile Ser Leu Lys Lys
     50
                         55
                                              60
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4085

Glu Pro Leu Tyr Val Gly Val Asp Asp Asp Lys Ala Asn Ala Thr Val 65 70 75 Asp Gly Leu Glu Gln Lys Asn Arg Lys Lys Leu Met Val Phe Phe 90 85 Ser Ser Cys Met Ser Val Lys Tyr His Tyr Glu Leu Leu Asn Tyr Ile 105 Asp Leu Pro Val Leu Ala Ile His Gly Lys Gln Lys Gln Asn Lys Arg 120 Thr Thr Phe Phe Gln Phe Cys Asn Ala Asp Ser Gly Thr Leu Leu 135 130 Cys Thr Asp Val Ala Ala Arg Gly Leu Asp Ile Pro Glu Val Asp Trp 155 Ile Val Gln Tyr Asp Pro Pro Asp Asp Pro Lys Glu Tyr Ile His Arg 165 170 Val Gly Arg Thr Ala Arg Gly Leu Asn Gly Arg Gly His Ala Leu Leu 185 190 180 Ile Leu Arg Pro Glu Glu Leu Gly Phe Leu Arg Tyr Leu Lys Gln Ser 195 200 Lys Val Pro Leu Ser Glu Phe Xaa Leu Phe Leu Val 215 <210> 4516 <211> 82 <212> PRT <213> Homo sapiens <400> 4516 Leu Glu Leu Phe Cys Asn Ile Thr Glu Phe Val Arg Ser Leu Ala Lys Ile Phe Glu Gln Phe Ile Asn Val Glu Gln Met Phe Leu Phe Thr Ala 20 25

Leu Phe Val Thr Glu Gly Asp Lys Phe Ser Ser His Asp Tyr Trp Leu
35 40 45

Pro Cys Thr Ala Ile Phe Ile His Asn Ser Arg His Phe Pro Phe Leu

55

4086

Trp Lys Ser Cys Cys Tyr Leu Asn Tyr Lys Cys Asn Cys Val Val Asn 65 70 75 80

Glu Ser

<210> 4517

<211> 75

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4517

Lys Pro Gln Pro Leu Ala Tyr Ser Ser Phe Asn Thr Arg Asp Leu Trp

1 5 10 15

Leu Ile Trp Gly Arg Lys Thr Leu Lys Val Ile Ser Leu Gly Gln Arg 20 25 30

Pro Tyr Cys Thr Arg Gly Lys Lys Tyr Ile Leu His Leu Leu Leu 35 40 45

Gln Leu Cys Leu Lys Phe Ile Cys Leu Val Ile Leu Ser Thr Xaa Thr 50 55 60

Asn Phe Leu Val Tyr Phe Lys His Leu Val Gly 65 70 75

<210> 4518

<211> 38

<212> PRT

<213> Homo sapiens

<400> 4518

Val Asp Pro Glu Met Lys Val Glu Arg Tyr Lys Arg Thr Phe Asp Gln 1 5 10 15

Asn Glu Glu Leu Gly Leu Asn Asp Met Lys Thr Glu Gly Tyr Glu Ala 20 25 30

Gly Leu Ala Pro Gln Arg

4087

<210> 4519 <211> 143 <212> PRT <213> Homo sapiens <400> 4519 Ala Arg Ala Asn Pro Ala Met Ala Tyr Ala Asn Glu Val Lys Arg Val 10 15 5 Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile Ala Ala Phe Phe Ala 25 20 Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala Gly Gly Val Phe Val 55 Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val Gly Lys His Phe Trp 70 75 65 Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro Asp Ile Val Thr Met 85 Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala Cys Val Ala Ala Thr 105 Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly Leu Ser Thr Ser Thr 120 125 115 Arg Leu Gly Ala Ala Gln Cys Pro Ala Leu Trp Gly Trp Pro Ser 135 140 130 <210> 4520 <211> 77 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (43) <223> Xaa equals any of the naturally occurring L-amino acids

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)

4088

<220> <221> SITE <222> (75) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4520 Val Thr His Ser Val Met Leu Gly Arg Pro Gln Ala Glu Lys His Leu Leu Gln Leu Thr Leu Phe Leu Ala Ile His Ser Phe Gly Leu Lys Ile 25 Leu Gln His Leu Gln Glu Ser Phe Thr Asn Xaa Ser Phe Gly Gly Val 40 35 Val Leu Asn Tyr Gln Leu Thr Arg Met Arg Xaa Leu Ala Leu Gly Ser Gln Pro Ala Asn Met Asp Gly Leu Ser Gln Xaa Leu Lys 70 <210> 4521 <211> 347 <212> PRT <213> Homo sapiens <400> 4521 Arg Gly Val Val Asp Ser Glu Asp Leu Pro Leu Asn Ile Ser Arg Glu 10 Met Leu Gln Gln Ser Lys Ile Leu Lys Val Ile Arg Lys Asn Ile Val 25 Lys Lys Cys Leu Glu Leu Phe Ser Glu Leu Ala Glu Asp Lys Glu Asn 45 35 40 Tyr Lys Lys Phe Tyr Glu Ala Phe Ser Lys Asn Leu Lys Leu Gly Ile 55 50 His Glu Asp Ser Thr Asn Arg Arg Leu Ser Glu Leu Leu Arg Tyr 75 His Thr Ser Gln Ser Gly Asp Glu Met Thr Ser Leu Ser Glu Tyr Val 90 Ser Arg Met Lys Glu Thr Gln Lys Ser Ile Tyr Tyr Ile Thr Gly Glu

105

110

Ser	Lys	Glu 115	Gln	Val	Ala	Asn	Ser 120	Ala	Phe	Val	Glu	Arg 125	Val	Arg	Lys
Arg	Gly 130	Phe	Glu	Val	Val	Tyr 135	Met	Thr	Glu	Pro	Ile 140	Asp	Glu	Tyr	Суз
Val 145	Gln	Gln	Leu	Lys	Glu 150	Phe	Asp	Gly	Lys	Ser 155	Leu	Val	Ser	Val	Thr 160
Lys	Glu	Gly	Leu	Glu 165	Leu	Pro	Glu	Asp	Glu 170	Glu	Glu	Lys	Lys	Lys 175	Met
Glu	Glu	Ser	Lys 180	Ala	Lys	Phe	Glu	Asn 185	Leu	Cys	Lys	Leu	Met 190	Lys	Glu
Ile	Leu	Asp 195	Lys	Lys	Val	Glu	Lys 200	Val	Thr	Ile	Ser	Asn 205	Arg	Leu	Val
Ser	Ser 210	Pro	Cys	Cys	Ile	Val 215	Thr	Ser	Thr	Tyr	Gly 220	Trp	Thr	Ala	Asn
Met 225	Glu	Arg	Ile	Met	Lys 230	Ala	Gln	Ala	Leu	Arg 235	Asp	Asn	Ser	Thr	Met 240
Gly	Tyr	Met	Met	Ala 245	Lys	Lys	His	Leu	Glu 250	Ile	Asn	Pro	Asp	His 255	Pro
Ile	Val	Glu	Thr 260	Leu	Arg	Gln	Lys	Ala 265	Glu	Ala	Asp	Lys	Asn 270	Asp	Lys
Ala	Val	Lys 275	Asp	Leu	Val	Val	Leu 280	Leu	Phe	Glu	Thr	Ala 285	Leu	Leu	Ser
Ser	Gly 290	Phe	Ser	Leu	Glu	Asp 295	Pro	Gln	Thr	His	Ser 300	Asn	Arg	Ile	Tyr
Arg 305	Met	Ile	Lys	Leu	Gly 310	Leu	Gly	Ile	Asp	Glu 315	Asp	Glu	Val	Ala	Ala 320
Glu	Glu	Pro	Asn	Ala 325	Ala	Val	Pro	Asp	Glu 330	Ile	Pro	Pro	Leu	Glu 335	Gly
Asp	Glu	Asp	Ala 340	Ser	Arg	Met	Glu	Glu 345	Val	Asp					

<210> 4522

<211> 81

<212> PRT

<213> Homo sapiens

4090

<220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (13) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (14) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4522 Leu Phe Leu Xaa Gly Gly Lys Asp Pro Leu Val Pro Xaa Xaa Lys Gln Leu Gly Lys Asp Leu Ala Leu Tyr Ile Tyr Trp Met Val Leu Met Ala 20 25 Lys Leu Leu Asn Ser Leu Ile Ser His Val Ser Ala Ser Arg Ile Ser 40 Asp Arg Asn Glu Thr His Leu Lys Met Arg Leu Thr Trp Arg Phe Phe Phe Pro Asn Leu Ser Tyr Leu Asn Trp Lys Asn Asn Gln Leu Ile Leu 75 70 Cys <210> 4523 <211> 56 <212> PRT <213> Homo sapiens <400> 4523 Thr Gln Val Met Gly Leu Cys Cys Thr Asp Tyr Phe Val Val His Val 5 10 Leu Ser Leu Val Pro Asn Ser Tyr Phe Phe Cys Ser Ser Pro Ser Ser 20 Tyr Pro Leu Pro Ser Ser Trp Pro Asn Val Tyr Cys Ser Leu Leu Cys 35 40 45

4091

Asn Asn His Ser Asn Leu Cys Phe 50 55

115

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<210> 4524
<211> 193
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (188)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (191)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4524
Gly Ala Gly Ala Ala Glu Pro Gly Pro Ala Ala Glu Leu Glu Ala Leu
                                     10
                                                          15
Leu Ser Ser Lys Asp Asp Val Gly Lys Ser Val His Glu Leu Glu Arg
Ala Cys Arg Val Ala Glu Gln Ala Ala Asn Asp Leu Arg Ala Gln Val
                             40
Thr Glu Leu Glu Asp Glu Leu Thr Ala Ala Glu Asp Ala Lys Leu Arg
     50
                         55
Leu Glu Val Thr Val Gln Ala Leu Lys Thr Gln His Glu Arg Asp Leu
 65
                     70
                                         75
Gln Gly Arg Asp Glu Ala Gly Glu Glu Arg Arg Arg Gln Leu Ala Lys
                                     90
Gln Leu Arg Asp Ala Glu Val Glu Arg Asp Glu Glu Arg Lys Gln Arg
            100
                                105
                                                     110
Thr Leu Ala Val Ala Ala Arg Lys Leu Glu Gly Glu Leu Glu Glu
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4092 Leu Lys Ala Gln Met Ala Ser Ala Gly Gln Gly Lys Glu Glu Ala Val Lys Gln Leu Arg Lys Met Gln Ala Gln Met Lys Glu Leu Trp Arg Glu 155 150 Val Glu Glu Thr Arg Thr Phe Arg Glu Glu Ile Phe Ser Gln Asn Arg 170 165 Glu Ser Glu Lys Arg Leu Lys Gly Leu Lys Leu Xaa Cys Cys Xaa Cys 185 180 Xaa <210> 4525 <211> 218 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (96) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (105) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (180) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (190) <223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (207)

<223> Xaa equals any of the naturally occurring L-amino acids

4093

<400> 4525 Ala Ser Ala Ser Ile Cys Ser Gly Ile Lys Tyr Ala Phe Gln Val Ile 10 Gly Glu Leu His Ser Gln Leu Asp Gly Ser Glu Val Leu Leu Leu Thr 25 Asp Gly Glu Asp Asn Thr Ala Ser Ser Cys Ile Asp Glu Val Lys Gln 45 35 40 Ser Gly Ala Ile Val His Phe Ile Ala Leu Gly Arg Ala Ala Asp Glu 55 Ala Val Ile Glu Met Ser Lys Ile Thr Gly Gly Ser His Phe Tyr Val Ser Asp Glu Ala Gln Asn Asn Gly Leu Ile Asp Ala Phe Gly Ala Xaa 90 85 Thr Ser Gly Asn Thr Asp Leu Ser Xaa Lys Ser Leu Gln Leu Glu Ser 105 100 Lys Gly Leu Thr Leu Asn Ser Asn Ala Trp Met Asn Asp Thr Val Ile 115 120 125 Ile Asp Ser Thr Val Gly Lys Asp Thr Phe Phe Leu Ile Thr Trp Asn 135 Ser Leu Pro Pro Ser Ile Ser Leu Trp Asp Pro Ser Gly Thr Ile Met 145 150 155 160 Glu Asn Phe Thr Val Asp Ala Thr Ser Lys Met Ala Tyr Leu Ser Ile 170 165 Pro Gly Thr Xaa Lys Val Gly Thr Trp Ala Tyr Asn Leu Xaa Ala Lys 185 Ala Xaa Pro Glu Thr Leu Thr Ile Thr Val Thr Ser Arg Ala Xaa Lys 200 205 Phe Phe Cys Ala Ser Asn His Ser Glu Cys 210 215

<210> 4526

<211> 76

<212> PRT

<213> Homo sapiens

4094

<400> 4526 Gly Ala Phe Leu Met Ala Thr Ala Ala Trp Leu Thr Thr Val Phe Lys 10 15 1 5 Gln Pro Gly Cys Ala Pro Glu Leu His Trp Ala Ser Phe His Asn Tyr 20 25 Gly Ser Val Ser Ile Thr Leu Ile Ser Glu Cys Gly Arg His Leu Asn 40 Lys Asn His Glu Ser His Phe Thr Asn Gln Asp Thr Gln Asp Val Arg 55 Leu Ser Asp Leu Ser Tyr Gln Gly His Lys Ala Ser 70 65 <210> 4527 <211> 147 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (41) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4527 Cys Phe Ser Ser Ser Gly Phe Thr Cys His Asp His Gly Ala Thr Val 5 15 Leu Gln Tyr Ala Pro Lys Gln Gln Leu Leu Ile Ser Gly Gly Arg Lys 20 25 Arg His Val Cys Ile Phe Asp Ile Xaa Gln Arg Gln Leu Ile His Thr Phe Gln Ala His Asp Ser Ala Ile Lys Ala Leu Ala Leu Asp Pro Tyr 55 Glu Glu Tyr Phe Thr Thr Gly Ser Ala Glu Gly Asn Ile Lys Val Trp 70 75 65 Arg Leu Thr Gly His Gly Leu Ile His Ser Phe Lys Ser Glu His Ala 85 Lys Gln Ser Ile Phe Arg Asn Ile Gly Ala Gly Val Met Gln Ile Asp 105

Ile Ile Gln Gly Asn Arg Leu Phe Ser Cys Gly Ala Asp Gly Thr Leu

Lys Thr Arg Val Leu Pro Asn Ala Phe Asn Ile Pro Asn Arg Ile Leu Asp Ile Leu <210> 4528 <211> 423 <212> PRT <213> Homo sapiens <400> 4528 Pro Glu Asn Asn Gln Ile Glu Thr Met Glu Asp Leu Cys Val Ala Asn Thr Leu Phe Ala Leu Asn Leu Phe Lys His Leu Ala Lys Ala Ser Pro Thr Gln Asn Leu Phe Leu Ser Pro Trp Ser Ile Ser Ser Thr Met Ala Met Val Tyr Met Gly Ser Arg Gly Ser Thr Glu Asp Gln Met Ala Lys Val Leu Gln Phe Asn Glu Val Gly Ala Asn Ala Val Thr Pro Met Thr Pro Glu Asn Phe Thr Ser Cys Gly Phe Met Gln Gln Ile Gln Lys Gly Ser Tyr Pro Asp Ala Ile Leu Gln Ala Gln Ala Asp Lys Ile His Ser Ser Phe Arg Ser Leu Ser Ser Ala Ile Asn Ala Ser Thr Gly Asn Tyr Leu Leu Glu Ser Val Asn Lys Leu Phe Gly Glu Lys Ser Ala Ser Phe Arg Glu Glu Tyr Ile Arg Leu Cys Gln Lys Tyr Tyr Ser Ser Glu Pro Gln Ala Val Asp Phe Leu Glu Cys Ala Glu Glu Ala Arg Lys Lys Ile Asn Ser Trp Val Lys Thr Gln Thr Lys Gly Lys Ile Pro Asn Leu

4096

Leu	Pro	Glu 195	Gly	Ser	Val	Asp	Gly 200	Asp	Thr	Arg	Met	Val 205	Leu	Val	Asn
Ala	Val 210	Tyr	Phe	Lys	Gly	Lys 215	Trp	Lys	Thr	Pro	Phe 220	Glu	Lys	Lys	Leu
Asn 225	Gly	Leu	Tyr	Pro	Phe 230	Arg	Val	Asn	Ser	Ala 235	Gln	Arg	Thr	Pro	Val 240
Gln	Met	Met	Tyr	Leu 245	Arg	Glu	Lys	Leu	Asn 250	Ile	Gly	Tyr	Ile	Glu 255	Asp
Leu	Lys	Ala	Gln 260	Ile	Leu	Glu	Leu	Pro 265	Туr	Ala	Gly	Asp	Val 270	Ser	Met
Phe	Leu	Leu 275	Leu	Pro	Asp	Glu	Ile 280	Ala	Asp	Val	Ser	Thr 285	Gly	Leu	Glu
Leu	Leu 290	Glu	Ser	Glu	Ile	Thr 295	Tyr	Asp	Lys	Leu	Asn 300	Lys	Trp	Thr	Ser
Lys 305	Asp	Lys	Met	Ala	Glu 310	Asp	Glu	Val	Glu	Val 315	Tyr	Ile	Pro	Gln	Phe 320
Lys	Leu	Glu	Glu	His 325	Tyr	Glu	Leu	Arg	Ser 330	Ile	Leu	Arg	Ser	Met 335	Gly
Met	Glu	Asp	Ala 340	Phe	Asn	Lys	Gly	Arg 345	Ala	Asn	Phe	Ser	Gly 350	Met	Ser
Glu	Arg	Asn 355	Asp	Leu	Phe	Leu	Ser 360	Glu	Val	Phe	His	Gln 365	Ala	Met	Val
Asp	Val 370	Asn	Glu	Glu	Gly	Thr 375	Glu	Ala	Ala	Ala	Gly 380	Thr	Gly	Gly	Val
Met 385	Thr	Gly	Arg	Thr	Gly 390	His	Gly	Gly	Pro	Gln 395	Phe	Val	Ala	Asp	His 400
Pro	Phe	Leu	Phe	Leu 405	Ile	Met	His	Lys	Ile 410	Thr	Asn	Cys	Ile	Leu 415	Phe
Phe	Gly	Arg	Phe 420	Ser	Ser	Pro									

<210> 4529

<211> 86

<212> PRT

4097

<213> Homo sapiens

<400> 4529

Thr Met Glu Gly Cys Arg Pro Thr Ser Leu Ile Thr Ile Glu Ile His
1 5 10 15

Val Thr Ile Glu Pro Trp Lys Cys Ser Leu Ser Lys Leu Arg Cys Ala 20 25 30

Val Ser Ile Lys Tyr Ile Pro Asp Phe Lys Asp Val Pro Lys Asn Val 35 40 45

Asn Tyr Leu Asn Phe Tyr Ile Gly Glu Ile Asn Met Ser Trp Tyr Ser
50 55 60

Gly Leu Asn Lys Thr Ile Leu Ala Phe Leu Ser Leu Phe Phe Cys Lys 65 70 75 80

Lys Ile Lys Asn Cys Thr

85

<210> 4530

<211> 244

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4530

Gly Leu Arg Arg Leu Asp Ser Ala Ser Gly Thr Val Tyr Thr Ala Met
1 5 10 15

Asp Val Ala Thr Gly Gln Glu Val Ala Ile Lys Gln Met Asn Leu Gln
20 25 30

Gln Gln Pro Lys Lys Glu Leu Ile Ile Asn Glu Ile Leu Val Met Arg 35 40 45

Glu Asn Lys Asn Pro Asn Ile Val Asn Tyr Leu Asp Ser Tyr Leu Val
50 55 60

Gly Asp Glu Leu Trp Val Val Met Glu Tyr Leu Ala Gly Gly Ser Leu 65 70 75 80

Thr Asp Val Val Thr Glu Thr Cys Met Asp Glu Gly Gln Ile Ala Ala 85 90 95

4098

Val Cys Arg Glu Xaa Leu Gln Ala Leu Glu Phe Leu His Ser Asn Gln 100 105 110 Ile Thr Pro Glu Gln Ser Lys Arg Ser Thr Met Val Gly Thr Pro Tyr 120 Trp Met Ala Pro Glu Val Val Thr Arg Lys Ala Tyr Gly Pro Lys Val 135 Asp Ile Trp Ser Leu Gly Ile Met Ala Ile Glu Met Ile Glu Gly Glu 155 150 Pro Pro Tyr Leu Asn Glu Asn Pro Leu Arg Ala Leu Tyr Leu Ile Ala 165 170 Thr Asn Gly Thr Pro Glu Leu Gln Asn Pro Glu Lys Leu Ser Ala Ile 185 Phe Arg Asp Phe Leu Asn Arg Cys Leu Glu Met Asp Val Glu Lys Arg 205 200 Gly Ser Ala Lys Glu Leu Leu Gln His Gln Phe Leu Lys Ile Ala Lys 210 215 220 Pro Leu Ser Ser Leu Thr Pro Leu Ile Ala Ala Lys Glu Ala Thr 225 230 235 Lys Asn Asn His <210> 4531 <211> 624 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (2) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (188)

<223> Xaa equals any of the naturally occurring L-amino acids

<220> <221> SITE <222> (192)

4099

<223> Xaa equals any of the naturally occurring L-amino acids <400> 4531 His Xaa His Ser Phe Ser Ser Gly Tyr Val Glu Met Glu Phe Glu Phe 10 Asp Arg Leu Arg Ala Phe Gln Ala Met Gln Val His Cys Asn Asn Met 20 His Thr Leu Gly Ala Arg Leu Pro Gly Gly Val Glu Cys Arg Phe Arg Arg Gly Pro Ala Met Ala Trp Glu Gly Glu Pro Met Arg His Asn Leu 55 Gly Gly Asn Leu Gly Asp Pro Arg Ala Arg Ala Val Ser Val Pro Leu 70 75 65 Gly Gly Arg Val Ala Arg Phe Leu Gln Cys Arg Phe Leu Phe Ala Gly 90 Pro Trp Leu Leu Phe Ser Glu Ile Ser Phe Ile Ser Asp Val Val Asn 105 Asn Ser Ser Pro Ala Leu Gly Gly Thr Phe Pro Pro Ala Pro Trp Trp 120 Pro Pro Gly Pro Pro Thr Asn Phe Ser Ser Leu Glu Leu Glu Pro 130 135 Arg Gly Gln Gln Pro Val Ala Lys Ala Glu Gly Ser Pro Thr Ala Ile 145 155 Leu Ile Gly Cys Leu Val Ala Ile Ile Leu Leu Leu Leu Ile Ile 165 170 Ala Leu Met Leu Trp Arg Leu His Trp Arg Arg Xaa Leu Ser Lys Xaa 190 180 185 Glu Arg Arg Val Leu Glu Glu Glu Leu Thr Val His Leu Ser Val Pro 200 205 195 Gly Asp Thr Ile Leu Ile Asn Asn Arg Pro Gly Pro Arg Glu Pro Pro 215 Pro Tyr Gln Glu Pro Arg Pro Arg Gly Asn Pro Pro His Ser Ala Pro 230 235 Cys Val Pro Asn Gly Ser Ala Leu Leu Leu Ser Asn Pro Ala Tyr Arg 245 250

Leu	Leu	Leu	Ala 260	Thr	Tyr	Ala	Arg	Pro 265	Pro	Arg	Gly	Pro	Gly 270	Pro	Pro
Thr	Pro	Ala 275	Trp	Ala	Lys	Pro	Thr 280	Asn	Thr	Gln	Ala	Туг 285	Ser	Gly	Asp
Tyr	Met 290	Glu	Pro	Glu	Lys	Pro 295	Gly	Ala	Pro	Leu	Leu 300	Pro	Pro	Pro	Pro
Gln 305	Asn	Ser	Val	Pro	His 310	Tyr	Ala	Glu	Ala	Asp 315	Ile	Val	Thr	Leu	Gln 320
Gly	Val	Thr	Gly	Gly 325	Asn	Thr	Tyr	Ala	Val 330	Pro	Ala	Leu	Pro	Pro 335	Gly
Ala	Val	Gly	Asp 340	Gly	Pro	Pro	Arg	Val 345	Asp	Phe	Pro	Arg	Ser 350	Arg	Leu
Arg	Phe	Lys 355	Glu	Lys	Leu	Gly	Glu 360	Gly	Gln	Phe	Gly	Glu 365	Val	His	Leu
Cys	Glu 370	Val	Asp	Ser	Pro	Gln 375	Asp	Leu	Val	Ser	Leu 380	Asp	Phe	Pro	Leu
Asn 385	Val	Arg	Lys	Gly	His 390	Pro	Leu	Leu	Val	Ala 395	Val	Lys	Ile	Leu	Arg 400
Pro	Asp	Ala	Thr	Lys 405	Asn	Ala	Arg	Asn	Asp 410	Phe	Leu	Lys	Glu	Val 415	Lys
Ile	Met	Ser	Arg 420	Leu	Lys	Asp	Pro	Asn 425	Ile	Ile	Arg	Leu	Leu 430	Gly	Val
Cys	Val	Gln 435	Asp	Asp	Pro	Leu	Cys 440	Met	Ile	Thr	Asp	Tyr 445	Met	Glu	Asn
Gly	Asp 450	Leu	Asn	Gln	Phe	Leu 455	Ser	Ala	His	Gln	Leu 460	Glu	Asp	Lys	Ala
Ala 465	Glu	Gly	Ala	Pro	Gly 470	Asp	Gly	Gln	Ala	Ala 475	Gln	Gly	Pro	Thr	Ile 480
Ser	Tyr	Pro	Met	Leu 485	Leu	His	Val	Ala	Ala 490	Gln	Ile	Ala	Ser	Gly 495	Met
Arg	Tyr	Leu	Ala 500	Thr	Leu	Asn	Phe	Val 505	His	Arg	Asp	Leu	Ala 510	Thr	Arg
Asn	Cys	Leu 515	Val	Gly	Glu	Asn	Phe 520	Thr	Ile	Lys	Ile	Ala 525	Asp	Phe	Gly

4101

Met Ser Arg Asn Leu Tyr Ala Gly Asp Tyr Tyr Arg Val Gln Gly Arg 530 540

Ala Val Leu Pro Ile Arg Trp Met Ala Trp Glu Cys Ile Leu Met Gly 545 550 555 560

Lys Phe Thr Thr Ala Ser Asp Val Trp Ala Phe Gly Val Thr Leu Trp 565 570 575

Glu Val Leu Met Leu Cys Arg Ala Gln Pro Phe Gly Gln Leu Thr Asp 580 585 590

Glu Gln Val Ile Glu Asn Ala Gly Glu Phe Phe Arg Asp Gln Gly Arg
595 600 605

Gln Val Tyr Leu Ser Arg Pro Pro Ala Cys Pro Gln Ala Tyr Met Ser 610 620

<210> 4532

<211> 202

<212> PRT

<213> Homo sapiens

<220>

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<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (201)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4532

Xaa Gln Arg Trp Gly Gly Met Glu Ala Thr Ala Arg Lys Pro Gly Gln
1
5
10
15

Gln Trp Arg Ser Ser Val Ser Pro Ser Ser Gly Leu Glu Pro Ala Glu 20 25 30

Thr Ser Ala Gly Val Ser Ser Gln Gly Arg Trp Val Cys Gly Val Ser 35 40 45

Arg Gly Ala Val Pro Ala Arg Val Lys Arg Lys Leu Pro Arg Val Leu 50 55 60

4102

Cys Thr Pro Thr Arg Arg Pro Ser Pro Arg Gly Pro Ser Gln Pro 70 75 Asp Ala Arg Val Leu Cys Val Ser Asn Thr Arg Ser Val Pro Ala Pro 90 85 Arg Arg Pro Arg Cys Pro Gln Leu Glu Glu Asp Ile Ala Ala Lys Glu 100 105 Lys Leu Leu Arg Val Ser Glu Asp Glu Arg Asp Arg Val Leu Glu Glu 120 125 Leu His Lys Ala Glu Asp Ser Leu Leu Ala Ala Glu Glu Ala Ala Pro 135 Arg Leu Lys Pro Asp Val Ala Ser Leu Asn Arg Arg Ile Gln Leu Val 145 150 155 Glu Glu Glu Leu Asp Arg Ala Gln Glu Arg Leu Ala Thr Ala Leu Gln 165 170 Lys Leu Glu Glu Ala Asp Lys Ala Ala Asp Glu Ser Glu Arg Gly Met 185 Lys Val Ile Glu Ser Arg Ala Gln Xaa Gly 200 195 <210> 4533 <211> 397 <212> PRT <213> Homo sapiens <400> 4533 Pro Thr Arg Pro Ser Ser Val Ser Arg Arg Asp Lys Ser Lys Gln Val 10 Trp Glu Ala Val Leu Leu Pro Leu Ser Leu Leu Ser Met Met Asp Leu 25 Arg Asn Thr Pro Ala Lys Ser Leu Asp Lys Phe Ile Glu Asp Tyr Leu 35 40 Leu Pro Asp Thr Cys Phe Arg Met Gln Ile Asn His Ala Ile Asp Ile 55 50 Ile Cys Gly Phe Leu Lys Glu Arg Cys Phe Arg Gly Ser Ser Tyr Pro 75 70

Val Cys Val Ser Lys Val Val Lys Gly Gly Ser Ser Gly Lys Gly Thr

Thr Leu Arg Gly Arg Ser Asp Ala Asp Leu Val Val Phe Leu Ser Pro Leu Thr Thr Phe Gln Asp Gln Leu Asn Arg Arg Gly Glu Phe Ile Gln Glu Ile Arg Arg Gln Leu Glu Ala Cys Gln Arg Glu Arg Ala Phe Ser Val Lys Phe Glu Val Gln Ala Pro Arg Trp Gly Asn Pro Arg Ala Leu Ser Phe Val Leu Ser Ser Leu Gln Leu Gly Glu Gly Val Glu Phe Asp Val Leu Pro Ala Phe Asp Ala Leu Asp Phe Ala Arg Thr Gly Gln Leu Thr Gly Gly Tyr Lys Pro Asn Pro Gln Ile Tyr Val Lys Leu Ile Glu Glu Cys Thr Asp Leu Gln Lys Glu Gly Glu Phe Ser Thr Cys Phe Thr Glu Leu Gln Arg Asp Phe Leu Lys Gln Arg Pro Thr Lys Leu Lys Ser Leu Ile Arg Leu Val Lys His Trp Tyr Gln Asn Cys Lys Lys Leu Gly Lys Leu Pro Pro Gln Tyr Ala Leu Glu Leu Leu Thr Val Tyr Ala Trp Glu Arg Gly Ser Met Lys Thr His Phe Asn Thr Ala Gln Gly Phe Arg Thr Val Leu Glu Leu Val Ile Asn Tyr Gln Gln Leu Cys Ile Tyr Trp Thr Lys Tyr Tyr Asp Phe Lys Asn Pro Ile Ile Glu Lys Tyr Leu Arg Arg Gln Leu Thr Lys Pro Arg Pro Val Ile Leu Asp Pro Ala Asp Pro Thr Gly Asn Leu Gly Gly Gly Asp Pro Lys Gly Trp Arg Gln Leu Ala Gln Glu Ala Glu Ala Trp Leu Asn Tyr Pro Cys Phe Lys Asn Trp

4104

360 365 355 Asp Gly Ser Pro Val Ser Ser Trp Ile Leu Leu Val Arg Pro Pro Ala 375 370 Ser Ser Leu Pro Phe Ile Pro Ala Pro Leu His Glu Ala 390 <210> 4534 <211> 262 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (20) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (26) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (53) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (67) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (71) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4534

Pro 1	His	Arg	Ile	Pro 5	Ser	Val	Leu	Ser	Asp 10	Leu	Ser	Ile	Gln	Ile 15	Tyr
Gln	Gln	Leu	Xaa 20	Lys	Ile	Ala	Glu	Gly 25	Xaa	Leu	Gln	Pro	Met 30	Ile	Val
Ser	Ala	Met 35	Leu	Glu	Asn	Glu	Ser 40	Ile	Gln	Gly	Leu	Ser 45	Gly	Val	Lys
Pro	Thr 50	Gly	Xaa	Xaa	Lys	Xaa 55	Ser	Ser	Ser	Met	Ala 60	Asp	Gly	Asp	Asn
Ser 65	Tyr	Xaa	Leu	Glu	Ala 70	Xaa	Ile	Arg	Gln	Met 75	Asn	Ala	Phe	His	Thr 80
Val	Met	Суз	Asp	Gln 85	G1y	Leu	Asp	Pro	Glu 90	Ile	Ile	Leu	Gln	Val 95	Phe
Lys	Gln	Leu	Phe 100	Tyr	Met	Ile	Asn	Ala 105	Val	Thr	Leu	Asn	Asn 110	Leu	Leu
Leu	Arg	Lys 115	Asp	Val	Cys	Ser	Trp 120	Ser	Thr	Gly	Met	Gln 125	Leu	Arg	Tyr
Asn	Ile 130	Ser	Gln	Leu	Glu	Glu 135	Trp	Leu	Arg	Gly	Arg 140	Asn	Leu	His	Gln
Ser 145	Gly	Ala	Val	Gln	Thr 150	Met	Glu	Pro	Leu	Ile 155	Gln	Ala	Ala	Gln	Leu 160
Leu	Gln	Leu	Lys	Lys 165	Lys	Thr	Gln	Glu	Asp 170	Ala	Glu	Ala	Ile	Cys 175	Ser
Leu	Cys	Thr	Ser 180	Leu	Ser	Thr	Gln	Gln 185	Ile	Val	Lys	Ile	Leu 190	Asn	Leu
Tyr	Thr	Pro 195	Leu	Asn	Glu	Phe	Glu 200	Glu	Arg	Val	Thr	Val 205	Ala	Phe	Ile
Arg	Thr 210	Ile	Gln	Ala	Gln	Leu 215	Gln	Glu	Arg	Asn	Asp 220	Pro	Gln	Gln	Leu
Leu 225	Leu	Asp	Ala	Lys	His 230	Met	Phe	Pro	Val	Leu 235	Phe	Pro	Phe	Asn	Pro 240
Ser	Ser	Leu	Thr	Met 245	Asp	Ser	Ile	His	Ile 250	Pro	Ala	Cys	Leu	Asn 255	Leu
Glu	Phe	Leu	Asn 260	Glu	Val										

4106

<210> 4535 <211> 451 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (371) <223> Xaa equals any of the naturally occurring L-amino acids Gly Met Glu Gly Ser Lys Thr Ser Asn Asn Ser Thr Met Gln Val Ser 10 Phe Val Cys Gln Arg Cys Ser Gln Pro Leu Lys Leu Asp Thr Ser Phe Lys Ile Leu Asp Arg Val Thr Ile Gln Glu Leu Thr Ala Pro Leu Leu 40 Thr Thr Ala Gln Ala Lys Pro Gly Glu Thr Gln Glu Glu Glu Thr Asn 50 55 Ser Gly Glu Glu Pro Phe Ile Glu Thr Pro Arg Gln Asp Gly Val Ser 70 Arg Arg Phe Ile Pro Pro Ala Arg Met Met Ser Thr Glu Ser Ala Asn 90 Ser Phe Thr Leu Ile Gly Glu Ala Ser Asp Gly Gly Thr Met Glu Asn 100 105 Leu Ser Arg Arg Leu Lys Val Thr Gly Asp Leu Phe Asp Ile Met Ser 115 120 Gly Gln Thr Asp Val Asp His Pro Leu Cys Glu Glu Cys Thr Asp Thr 130 135 140 Leu Leu Asp Gln Leu Asp Thr Gln Leu Asn Val Thr Glu Asn Glu Cys 150 155 Gln Asn Tyr Lys Arg Cys Leu Glu Ile Leu Glu Gln Met Asn Glu Asp 165 170 Asp Ser Glu Gln Leu Gln Met Glu Leu Lys Glu Leu Ala Leu Glu Glu 180 185 Glu Arg Leu Ile Gln Glu Leu Glu Asp Val Glu Lys Asn Arg Lys Ile 205 195 200

Val	Ala 210	Glu	Asn	Leu	Glu	Lys 215	Val	Gln	Ala	Glu	Ala 220	Glu	Arg	Leu	Asp
Gln 225	Glu	Glu	Ala	Gln	Tyr 230	Gln	Arg	Glu	Tyr	Ser 235	Glu	Phe	Lys	Arg	Gln 240
Gln	Leu	Glu	Leu	Asp 245	Asp	Glu	Leu	Lys	Ser 250	Val	Glu	Asn	Gln	Met 255	Arg
Tyr	Ala	Gln	Thr 260	Gln	Leu	Asp	Lys	Leu 265	Lys	Lys	Thr	Asn	Val 270	Phe	Asn
Ala	Thr	Phe 275	His	Ile	Trp	His	Ser 280	Gly	Gln	Phe	Gly	Thr 285	Ile	Asn	Asn
Phe	Arg 290	Leu	Gly	Arg	Leu	Pro 295	Ser	Val	Pro	Val	Glu 300	Trp	Asn	Glu	Ile
Asn 305	Ala	Ala	Trp	Gly	Gln 310	Thr	Val	Leu	Leu	Leu 315	His	Ala	Leu	Ala	Asn 320
Lys	Met	Gly	Leu	Lys 325	Phe	Gln	Arg	Tyr	Arg 330	Leu	Val	Pro	Tyr	Gly 335	Asn
His	Ser	Tyr	Leu 340	Glu	Ser	Leu	Thr	Asp 345	Lys	Ser	Lys	Glu	Leu 350	Pro	Leu
Tyr	Cys	Ser 355	Gly	Gly	Leu	Arg	Phe 360	Phe	Trp	Asp	Asn	Lys 365	Phe	Asp	His
Ala	Met 370	Xaa	Ala	Phe	Leu	Asp 375	Cys	Val	Gln	Gln	Phe 380	Lys	Glu	Glu	Val
Glu 385	Lys	Gly	Glu	Thr	Arg 390	Phe	Cys	Leu	Pro	Tyr 395	Arg	Met	Asp	Val	Glu 400
Lys	Gly	Lys	Ile	Glu 405	Asp	Thr	Gly	Gly	Ser 410	Gly	Gly	Ser	Tyr	Ser 415	Ile
Lys	Thr	Gln	Phe 420	Asn	Ser	Glu	Glu	Gln 425	Trp	Thr	Lys	Ala	Leu 430	Lys	Phe
Met	Leu	Thr 435	Asn	Leu	Lys	Trp	Gly 440	Leu	Ala	Trp	Val	Ser 445	Ser	Gln	Phe
Tyr	Asn	Lys													

PCT/US00/26524 WO 01/22920

4108

<210> 4536 <211> 35 <212> PRT <213> Homo sapiens <400> 4536 Val Tyr Ile Arg Asp Pro Leu Val His Ser Thr Ala Asp Ile Ser Ser Ile Phe Asn Thr Thr Val Cys Ser Lys Ala Arg Trp Ser Leu Leu Lys 25 Leu His Phe <210> 4537 <211> 201 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (127) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4537 Asn Asn Cys Ser Leu Leu Trp Val Leu Leu Ala Gly Phe Arg Leu Gly Asn Val Val His Ala Ile Gln Ala Thr Glu Gln Ser Ile His Ala Thr 25 Asp Leu Val Pro Arg Leu Cys Leu Thr Leu Ala Asn Leu Asn Arg Val 35 40 Ile Tyr Phe Ile Cys Asp Thr Ile Leu Trp Val Arg Ser Val Gly Leu 55 Thr Ser Gly Ile Asn Lys Glu Lys Trp Arg Thr Arg Ala Ala His His 75 70 Tyr Tyr Tyr Ser Leu Leu Ser Leu Val Arg Asp Leu Tyr Glu Ile 85 90 Ser Leu Gln Met Lys Arg Val Thr Cys Asp Arg Ala Lys Lys Glu Lys

Ser Ala Ser Gln Asp Pro Leu Trp Phe Ser Val Ala Glu Glu Xaa Thr 120

115

4109

Glu Trp Leu Gln Ser Phe Leu Leu Leu Leu Phe Arg Ser Leu Lys Gln 130 135 140

Asn Pro Leu Asp Leu Leu Gly Ile Tyr Lys Ser Asn Pro Gly Ile Ile 165 170 175

Gly Leu Gly Gly Leu Val Ser Ser Ile Ala Gly Met Ile Thr Val Ala 180 185 190

Tyr Pro Gln Met Lys Leu Lys Thr Arg 195 200

<210> 4538

<211> 70

<212> PRT

<213> Homo sapiens

<400> 4538

Ala Asp Ile Ala Gly Val Leu Ala Ile Arg Pro Asp Glu Leu Arg Phe 1 5 10 15

Arg Tyr Ser Met Val Ala Tyr Trp Arg Gln Ala Gly Leu Ser Tyr Ile
20 25 30

Arg Tyr Ser Gln Ile Cys Ala Lys Ala Val Arg Asp Ala Leu Lys Thr 35 40 45

Glu Phe Lys Ala Asn Ala Glu Lys Thr Ser Gly Ser Asn Val Lys Ile 50 55 60

Val Lys Val Lys Lys Glu 65 70

<210> 4539

<211> 72

<212> PRT

<213> Homo sapiens

<400> 4539

Ile Lys Ser Leu Asp Glu Gln Cys Val Val Gly Lys Ile Ser Lys His 1 5 10 15

Trp Thr Gly Ile Leu Arg Glu Ala Phe Thr Asp Ala Asp Asn Phe Gly

4110

30 20 25 Ile Gln Phe Pro Leu Asp Leu Asp Val Lys Met Lys Ala Val Met Ile 40 Gly Ala Cys Phe Leu Ile Asp Phe Met Phe Phe Glu Ser Thr Gly Ser 55 Gln Glu Gln Lys Ser Gly Val Trp 65 70 <210> 4540 <211> 376 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (364) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (370) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (372) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (374) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4540 Ser Asn Leu Val Pro Val Asp Ile Ile Glu Ser Val Val Ser Lys Glu 5 10 Met Asp Lys Arg Tyr Leu Gln Phe Asp Ile Lys Ala Phe Val Glu Asn 20 25 Asn Pro Ala Ile Lys Trp Cys Pro Thr Pro Gly Cys Asp Arg Ala Val 40 45

Arg Leu Thr Lys Gln Gly Ser Asn Thr Ser Gly Ser Asp Thr Leu Ser

60

55

Phe 65	Pro	Leu	Leu	Arg	Ala 70	Pro	Ala	Val	Asp	Cys 75	Gly	Lys	Gly	His	Leu 80
Phe	Cys	Trp	Glu	Суs 85	Leu	Gly	Glu	Ala	His 90	Glu	Pro	Суз	Asp	Cys 95	Gln
Thr	Trp	Lys	Asn 100	Trp	Leu	Gln	Lys	Ile 105	Thr	Glu	Met	Lys	Pro 110	Glu	Glu
Leu	Val	Gly 115	Val	Ser	Glu	Ala	Туr 120	Glu	Asp	Ala	Ala	Asn 125	Cys	Leu	Trp
Leu	Leu 130	Thr	Asn	Ser	Lys	Pro 135	Cys	Ala	Asn	Cys	Lys 140	Ser	Pro	Ile	Gln
Lys 145	Asn	Glu	Gly	Cys	Asn 150	His	Met	Gln	Cys	Ala 155	Lys	Cys	Lys	Tyr	Asp 160
Phe	Суз	Trp	Ile	Cys 165	Leu	Glu	Glu	Trp	Lys 170	Lys	His	Ser	Ser	Ser 175	Thr
Gly	Gly	Tyr	Tyr 180	Arg	Cys	Thr	Arg	Tyr 185	Glu	Val	Ile	Gln	His 190	Val	Glu
Glu	Gln	Ser 195	Lys	Glu	Met	Thr	Val 200	Glu	Ala	Glu	Lys	Lys 205	His	Lys	Arg
Phe	Gln 210	Glu	Leu	Asp	Arg	Phe 215	Met	His	Tyr	Tyr	Thr 220	Arg	Phe	Lys	Asn
His 225	Glu	His	Ser	Tyr	Gln 230	Leu	Glu	Gln	Arg	Leu 235	Leu	Lys	Thr	Ala	Lys 240
Glu	Lys	Met	Glu	Gln 245	Leu	Ser	Arg	Ala	Leu 250	Lys	Glu	Thr	Glu	Gly 255	Gly
Суз	Pro	qaA	Thr 260	Thr	Phe	Ile	Glu	Asp 265	Ala	Val	His	Val	Leu 270	Leu	Lys
Thr	Arg	Arg 275	Ile	Leu	Lys	Cys	Ser 280	Tyr	Pro	Tyr	Gly	Phe 285	Phe	Leu	Glu
Pro	Lys 290	Ser	Thr	Lys	Lys	Glu 295	Ile	Phe	Glu	Leu	Met 300	Gln	Thr	Asp	Leu
Glu 305	Met	Val	Thr	Glu	Asp 310	Leu	Ala	Gln	Lys	Val 315	Asn	Arg	Pro	Tyr	Leu 320
Arg	Thr	Pro	Arg	His 325	Lys	Ile	Ile	Lys	Ala 330	Ala	Cys	Leu	Val	Gln 335	Gln

4112

Ala Asp Ser Pro Glu Ala Ser Lys Ala His Phe Xaa Gly Gly Asn Met 355 360 365

Gly Xaa Gly Xaa Tyr Xaa Gly Val 370 375

<210> 4541

<211> 123

<212> PRT

<213> Homo sapiens

<400> 4541

Ala Arg Val Lys Leu Lys Tyr Cys Phe Thr Cys Lys Met Phe Arg Pro 1 5 10 15

Pro Arg Thr Ser His Cys Ser Val Cys Asp Asn Cys Val Glu Arg Phe 20 25 30

Asp His His Cys Pro Trp Val Gly Asn Cys Val Gly Arg Arg Asn Tyr 35 40 45

Arg Phe Phe Tyr Ala Phe Ile Leu Ser Leu Ser Phe Leu Thr Ala Phe 50 55 60

Ile Phe Ala Cys Val Val Thr His Leu Thr Leu Arg Ala Gln Gly Ser 65 70 75 80

Asn Phe Leu Ser Thr Leu Lys Glu Thr Pro Ala Ser Val Leu Gly Val 85 90 95

Gly Asp Leu Leu Leu His Leu Val His Ser Gly Pro Leu Arg Val
100 105 110

Ser His Val Pro Arg Arg Leu Gln Pro Asp Tyr 115 120

<210> 4542

<211> 245

<212> PRT

<213> Homo sapiens

<220>

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<222> (138)

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                                     10
Leu Thr Ser Pro Lys Gly Ser Arg Cys Ser Arg His Thr Phe Ala Pro
             20
                                 25
Ala Ala Met Thr Leu Ser Pro Leu Leu Leu Phe Leu Pro Pro Leu Leu
         35
                             40
                                                  45
Leu Leu Leu Asp Val Pro Thr Ala Ala Val Gln Ala Ser Pro Leu Gln
                         55
Ala Leu Asp Phe Phe Gly Asn Gly Pro Pro Val Asn Tyr Lys Thr Gly
                     70
                                         75
Asn Leu Tyr Leu Arg Gly Pro Leu Lys Lys Ser Asn Ala Pro Leu Val
                 85
                                      90
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4114

Asn Val Thr Leu Tyr Tyr Glu Ala Leu Cys Gly Gly Cys Arg Ala Phe
100 105 110

Leu Ile Arg Glu Leu Phe Pro Thr Trp Leu Leu Val Met Glu Ile Leu 115 120 125

Asn Val Thr Leu Val Pro Tyr Gly Asn Xaa Gln Glu Gln Xaa Xaa Xaa 130 135 140

Gly Arg Trp Glu Phe Lys Cys Gln His Gly Glu Glu Glu Cys Lys Phe 145 150 155 160

Asn Lys Val Glu Ala Cys Val Leu Asp Glu Leu Asp Met Glu Leu Ala 165 170 175

Phe Leu Thr Ile Val Cys Met Glu Glu Phe Glu Asp Met Glu Arg Ser 180 185 190

Leu Pro Leu Cys Cys Ser Ser Thr Pro Arg Leu Ser Gln Asn Tyr His
195 200 205

Glu Cys Ala Met Gly Arg Gly Xaa Ser His His Ala Thr Pro Arg Gln 210 215 220

Ile Ser Gln His Lys Asp Met Ser Trp Tyr Ala Met Glu Xaa Glu Ile 225 230 235 240

Thr Ser Leu Xaa Val 245

<210> 4543

<211> 197

<212> PRT

<213> Homo sapiens

<400> 4543

Tyr Trp Cys Glu Gln Cys Asp Val Gln Phe Ser Ser Ser Ser Glu Leu
1 5 10 15

Tyr Leu His Phe Gln Glu His Ser Cys Asp Glu Gln Tyr Leu Cys Gln 20 25 30

Phe Cys Glu His Glu Thr Asn Asp Pro Glu Asp Leu His Ser His Val 35 40 45

Val Asn Glu His Ala Cys Lys Leu Ile Glu Leu Ser Asp Lys Tyr Asn 50 55 60

Asn Gly Glu His Gly Gln Tyr Ser Leu Leu Ser Lys Ile Thr Phe Asp

4115

75 · 80 70 65 Lys Cys Lys Asn Phe Phe Val Cys Gln Val Cys Gly Phe Arg Ser Arg 90 Leu His Thr Asn Val Asn Arg His Val Ala Ile Glu His Thr Lys Ile 105 Phe Pro His Val Cys Asp Asp Cys Gly Lys Gly Phe Ser Ser Met Leu 120 115 Glu Tyr Cys Lys His Leu Asn Ser His Leu Ser Glu Gly Ile Tyr Leu 135 Cys Gln Tyr Cys Glu Tyr Ser Thr Gly Gln Ile Glu Asp Leu Lys Ile 150 155 His Leu Asp Phe Lys His Ser Ala Asp Leu Pro His Lys Cys Ser Asp 165 170 Cys Leu Met Arg Phe Gly Asn Glu Arg Glu Leu Ile Ser His Leu Pro 180 185 Val His Glu Thr Thr 195 <210> 4544 <211> 272 <212> PRT <213> Homo sapiens <400> 4544 Gly His Ala Met Ile Asp Leu Arg Ser Asp Thr Val Thr Arg Pro Ser Arg Ala Met Leu Glu Ala Met Met Ala Ala Pro Val Gly Asp Asp Val 25 20 Tyr Gly Asp Asp Pro Thr Val Asn Ala Leu Gln Asp Tyr Ala Ala Glu 40 Leu Ser Gly Lys Glu Ala Ala Ile Phe Leu Pro Thr Gly Thr Gln Ala 50 55 Asn Leu Val Ala Leu Leu Ser His Cys Glu Arg Gly Glu Glu Tyr Ile 65 70 Val Gly Gln Ala Ala His Asn Tyr Leu Phe Glu Ala Gly Gly Ala Ala 90 85

4116

Val Leu Gly Ser Ile Gln Pro Gln Pro Ile Asp Ala Ala Asp Gly 100 105 Thr Leu Pro Leu Asp Lys Val Ala Met Lys Ile Lys Pro Asp Asp Ile 120 His Phe Ala Arg Thr Lys Leu Leu Ser Leu Glu Asn Thr His Asn Gly 135 Lys Val Leu Pro Arg Glu Tyr Leu Lys Glu Ala Trp Glu Phe Thr Arg 150 155 Glu Arg Asn Leu Ala Leu His Val Asp Gly Ala Arg Ile Phe Asn Ala 165 170 Val Val Ala Tyr Gly Cys Glu Leu Lys Glu Ile Thr Gln Tyr Cys Asp 180 185 Ser Phe Thr Ile Cys Leu Ser Lys Gly Leu Gly Thr Pro Val Gly Ser 200 Leu Leu Val Gly Asn Arg Asp Tyr Ile Lys Arg Ala Ile Arg Trp Arg 210 215 Lys Met Thr Gly Gly Gly Met Arg Gln Ser Gly Ile Leu Ala Ala Ala 225 230 235 Gly Ile Tyr Ala Leu Lys Asn Asn Val Ala Arg Leu Gln Glu Asp His 245 250 Asp Asn Ala Ala Trp Met Ala Asp Ser Cys Val Lys Gln Ala Arg Met

<210> 4545

<211> 21

<212> PRT

<213> Homo sapiens

<400> 4545

Glu Cys Lys Met Val Gln Pro Leu Trp Lys Thr Ile Trp His Ser Phe 1 5 10 15

265

Asn Pro Ser Asn Ser

4117

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4118

Tyr His Pro Lys Ser Gln Pro Phe Val Asp His Val Phe Thr Phe Thr 210 215 220 Ile Leu Asp Asn Arg Ile Trp Phe Arg Asn Phe Gln Ile Ile Glu Glu 235 Asp Ala Ala Leu Val Glu Ile Gly Pro Arg Phe Val Leu Asn Leu Ile 250 Lys Ile Phe Gln Gly Ser Phe Gly Gly Pro Thr Leu Tyr Glu Asn Pro 265 His Tyr Gln Ser Pro Asn Met His Arg Arg Val Ile Arg Ser Ile Thr 275 280 Ala Ala Lys Tyr Arg Glu Lys Gln Gln Val Lys Asp Val Gln Lys Leu 295 300 Arg Lys Lys Glu Pro Lys Thr Leu Leu Pro His Asp Pro Thr Ala Asp 310 315 Val Phe Val Thr Pro Ala Glu Glu Lys Pro Ile Glu Ile Gln Trp Val 325 330 Lys Pro Glu Pro Lys Val Asp Leu Lys Ala Arg Lys Lys Arg Ile Tyr 340 345 Lys Arg Gln Arg Lys Met Lys Gln Arg Met Asp Ser Gly Lys Thr Lys 360 365

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<211> 565
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<212> PRT

<213> Homo sapiens

<400> 4547

Ile Pro Gly Ser Thr His Ala Ser Ala Gly Asn Leu Asp Ser Pro Glu
1 5 10 15

Gly Gly Phe Asp Ala Ile Met Gln Val Ala Val Cys Gly Ser Leu Ile 20 25 30

Gly Trp Arg Asn Val Thr Arg Leu Leu Val Phe Ser Thr Asp Ala Gly 35 40 45

Phe	His 50	Phe	Ala	Gly	Asp	Gly 55	Lys	Leu	Gly	Gly	Ile 60	Val	Leu	Pro	Asn
Asp 65	Gly	Gln	Суѕ	His	Leu 70	Glu	Asn	Asn	Met	Tyr 75	Thr	Met	Ser	His	Туг 80
Tyr	Asp	Tyr	Pro	Ser 85	Ile	Ala	His	Leu	Val 90	Gln	Lys	Leu	Ser	Glu 95	Asn
Asn	Ile	Gln	Thr 100	Ile	Phe	Ala	Val	Thr 105	Glu	Glu	Phe	Gln	Pro 110	Val	Tyr
Lys	Glu	Leu 115	Lys	Asn	Leu	Ile	Pro 120	Lys	Ser	Ala	Val	Gly 125	Thr	Leu	Ser
Ala	Asn 130	Ser	Ser	Asn	Val	Ile 135	Gln	Leu	Ile	Ile	Asp 140	Ala	Tyr	Asn	Ser
Leu 145	Ser	Ser	Glu	Val	Ile 150	Leu	Glu	Asn	Gly	Lys 155	Leu	Ser	Glu	Gly	Val 160
Thr	Ile	Ser	Tyr	Lys 165	Ser	Tyr	Cys	Lys	Asn 170	Gly	Val	Asn	Gly	Thr 175	Gly
Glu	Asn	Gly	Arg 180	Lys	Cys	Ser	Asn	Ile 185	Ser	Ile	Gly	Asp	Glu 190	Val	Gln
Phe	Glu	Ile 195	Ser	Ile	Thr	Ser	Asn 200	Lys	Cys	Pro	Lys	Lys 205	Asp	Ser	Asp
Ser	Phe 210	Lys	Ile	Arg	Pro	Leu 215	Gly	Phe	Thr	Glu	Glu 220	Val	Glu	Val	Ile
Leu 225	Gln	Tyr	Ile	Суѕ	Glu 230	Суѕ	Glu	Суѕ	Gln	Ser 235	Glu	Gly	Ile	Pro	Glu 240
Ser	Pro	Lys	Суѕ	His 245	Glu	Gly	Asn	Gly	Thr 250	Phe	Glu	Cys	Gly	Ala 255	Сув
Arg	Cys	Asn	Glu 260	Gly	Arg	Val	Gly	Arg 265	His	Cys	Glu	Cys	Ser 270	Thr	Asp
Glu	Val	Asn 275	Ser	Glu	Asp	Met	Asp 280	Ala	Tyr	Cys	Arg	Lys 285	Glu	Asn	Ser
Ser	Glu 290	Ile	Cys	Ser	Asn	Asn 295	Gly	Glu	Cys	Val	Суs 300	Gly	Gln	Cys	Val
Cys 305	Arg	Lys	Arg	Asp	Asn 310	Thr	Asn	Glu	Ile	Туr 315	Ser	Gly	Lys	Phe	Cys 320

Glu	Cys	Asp	Asn	Phe 325	Asn	Cys	Asp	Arg	Ser 330	Asn	Gly	Leu	Ile	Cys 335	Gly
Gly	Asn	Gly	Val 340	Cys	Lys	Cys	Arg	Val 345	Cys	Glu	Cys	Asn	Pro 350	Asn	Tyr
Thr	Gly	Ser 355	Ala	Cys	Asp	Cys	Ser 360	Leu	Asp	Thr	Ser	Thr 365	Суз	Glu	Ala
Ser	Asn 370	Gly	Gln	Ile	Cys	Asn 375	Gly	Arg	Gly	Ile	Cys 380	Glu	Cys	Gly	Val
Cys 385	Lys	Cys	Thr	Asp	Pro 390	Lys	Phe	Gln	Gly	Gln 395	Thr	Cys	Glu	Met	Cys 400
Gln	Thr	Cys	Leu	Gly 405	Val	Cys	Ala	Glu	His 410	Lys	Glu	Cys	Val	Gln 415	Cys
Arg	Ala	Phe	Asn 420	Lys	Gly	Glu	Lys	Lys 425	Asp	Thr	Cys	Thr	Gln 430	Glu	Cys
Ser	Tyr	Phe 435	Asn	Ile	Thr	Lys	Val 440	Glu	Ser	Arg	Asp	Lys 445	Leu	Pro	Gln
Pro	Val 450	Gln	Pro	Asp	Pro	Val 455	Ser	His	Cys	Lys	Glu 460	Lys	Asp	Val	Asp
Asp 465	Cys	Trp	Phe	Tyr	Phe 470	Thr	Tyr	Ser	Val	Asn 475	Gly	Asn	Asn	Glu	Val 480
Met	Val	His	Val	Val 485	Glu	Asn	Pro	Glu	Cys 490	Pro	Thr	Gly	Pro	Asp 495	Ile
Ile	Pro	Ile	Val 500	Ala	Gly	Val	Val	Ala 505	Gly	Ile	Val	Leu	Ile 510	Gly	Leu
Ala	Leu	Leu 515	Leu	Ile	Trp	Lys	Leu 520	Leu	Met	Ile	Ile	His 525	Asp	Arg	Arg
Glu	Phe 530	Ala	Lys	Phe	Glu	Lys 535	Glu	Lys	Met	Asn	Ala 540	Lys	Trp	Asp	Thr
Gly 545	Glu	Asn	Pro	Ile	Туr 550	Lys	Ser	Ala	Val	Thr 555	Thr	Val	Val	Asn	Pro 560
Lys	Tyr	Glu	Gly	Lys 565											

4121

<211> 60 <212> PRT <213> Homo sapiens <400> 4548 Val Thr Ser Lys Thr Gln Val Gly Leu Phe Lys Phe Leu Lys Phe Glu 10 Ile Phe Tyr Leu Gln Lys Ile Val Leu Cys Phe Ile Ile Ser Gln Met 20 25 Ser Val Arg Phe Leu Ser Thr Asn Asp His Ala Ser Ile Phe Phe Ser 40 Phe Lys Pro Pro Asn Gln Tyr Phe Ser Phe Lys Phe 55 <210> 4549 <211> 53 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (41) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4549 Thr Arg His Lys Ala Gln Leu Ile Phe Val Phe Leu Val Glu Thr Gly 10 Phe Asp Tyr Val Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser Ser Asp 25 Pro Pro Ala Ser Ala Ser Gln Arg Xaa Gly Thr Ile Asp Met Ser His 40 Arg Ala Trp Pro Ser 50 <210> 4550 <211> 166

<211> 166 <212> PRT <213> Homo sapiens <220> <221> SITE

4122

<222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (131) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4550 Ala Gln Xaa Leu Ser Ser Pro Val Arg Gly Ile Ser Gly Glu Gln Ser Thr Xaa Gly Ser Phe Pro Leu Arg Tyr Val Gln Asp Gln Val Ala Ala 25 20 Pro Phe Gln Leu Ser Asn His Thr Gly Arg Ile Lys Val Val Phe Thr 45 35 40 Pro Ser Ile Cys Lys Val Thr Cys Thr Lys Gly Ser Cys Gln Asn Ser 50 55 Cys Glu Lys Gly Asn Thr Thr Leu Ile Ser Glu Asn Gly His Ala 70 75 Ala Asp Thr Leu Thr Ala Thr Asn Phe Arg Val Val Ile Cys His Leu 90 95 85 Pro Cys Met Asn Gly Gly Gln Cys Ser Ser Arg Asp Lys Cys Gln Cys 105 100 Pro Pro Asn Phe Thr Gly Lys Leu Cys Gln Ile Pro Val His Gly Ala Ser Val Xaa Lys Leu Tyr Gln His Ser Gln Gln Pro Gly Lys Ala Leu 135 Gly Thr His Val Ile His Ser Thr His Thr Leu Pro Leu Thr Val Thr 160 145 155 150

Ser Gln Gln Glu Ser Lys 165

<210> 4551 <211> 60

4123

<212> PRT

<213> Homo sapiens

<400> 4551

Cys Val Pro Ser Thr Ser Ser Pro Gly Ile Ile Leu Ser Leu Ala Leu
1 5 10 15

Ala Gly Ile Leu Gly Ile Cys Ile Val Val Val Ser Ile Trp Leu 20 25 30

Phe Arg Arg Lys Ser Ile Lys Lys Gly Asp Asn Lys Gly Val Ile Tyr 35 40 45

Lys Pro Ala Thr Lys Met Glu Thr Glu Ala His Ala
50 55 60

<210> 4552

<211> 99

<212> PRT

<213> Homo sapiens

<400> 4552

His Cys Ile Leu Met Leu Phe Glu Asn Ala Ile Tyr Ile Val Lys Lys 1 5 10 15

Arg Ala Gly Ala Pro Ala Ala Leu Val Pro Trp Gly Ser His Pro Ser 20 25 30

Pro Gly Gly Leu Leu Gly Gly Leu Arg Arg Trp Ala Thr Glu Gly Gln 35 40 45

Ala Gly Ala Ala His Ser Pro His Glu Gly Ile Ser Val Ser Tyr Ser 50 55 60

Val Gln Arg Arg Gly Lys Thr Gln Cys Pro Gly Phe Ser Pro Pro Glu
65 70 75 80

Met Lys Asp Thr Leu Tyr Phe Leu Pro Asn Val Pro Ala Ser Arg Phe 85 90 95

Ile Met Asn

<210> 4553

<211> 73

<212> PRT

<213> Homo sapiens

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<400> 4553
Gly Gly Trp Phe Tyr Pro Phe Cys Leu Leu Phe Gly Thr Gln Leu Val
Phe Phe Gly Leu Leu Ser Ser Gly Ser Arg Ala Val Leu Ser Asn Thr
Val Thr Thr Cys Gly Cys Leu Lys Leu Ser Gln Leu Lys Ser His Lys
                             40
                                                 45
         35
Ile Lys Asn Ser Phe Leu Ser Cys Thr Asn His Val Ser Arg Gly Val
     50
                         55
Thr Val Cys Ser Ser Trp Leu Leu Tyr
 65
                     70
<210> 4554
<211> 142
<212> PRT
<213> Homo sapiens
<220>
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<222> (30)
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<222> (120)
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<221> SITE
<222> (126)
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<220>
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<222> (136)
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<220>
<221> SITE
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4125

<222> (138) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4554 Cys Leu Cys Leu His Cys Pro Ser Ser Tyr Leu Phe Cys Ser Met Ser His Ser Tyr Lys Lys Ala Ile Ser Asp Glu Ala Leu Arg Xaa Phe Gln 25 Met Asp Tyr Phe Gly Gly Leu Xaa Pro Gly Gln Tyr Ala Thr Arg Met 40 35 Thr Gly Gln Val His Gly Ser Gly Cys His Leu Arg Ser Ala Pro Cys 50 55 Asp Leu Gly Ala Ser Gln Arg Asn Tyr Pro Val Ile Ser Leu Lys Ser Met Leu Val Cys Phe Pro Lys Ala Asn Gln Gln Leu Ile Gln Thr Leu 85 90 Gly Pro Gln Ser Arg Trp Asn Asn Gly Arg Arg Leu Pro Glu Cys Gln 100 105 110 Val Leu Gln Asp Glu Leu Lys Xaa Arg Val Val Gly Arg Xaa Val Gly 115 Gly Lys Gly Pro Cys Pro Asp Xaa Cys Xaa Pro Cys Ile Tyr 135 140 <210> 4555 <211> 301 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (265) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (271) <223> Xaa equals any of the naturally occurring L-amino acids

Gly Thr Ser Val Cys Arg Arg Val Glu Lys Asn Trp Gly Ala Val Val

10

<400> 4555

Arg	Ser	Pro	Glu 20	Gly	Thr	Pro	Gln	Lys 25	Ile	Arg	Gln	Leu	Ile 30	Asp	Glu
Gly	Ile	Ala 35	Pro	Glu	Glu	Gly	Gly 40	Val	Asp	Ala	Lys	Asp 45	Thr	Ser	Ala
Thr	Ser 50	Gln	Ser	Val	Asn	Gly 55	Ser	Pro	Gln	Ala	Glu 60	Gln	Pro	Ser	Leu
Glu 65	Ser	Thr	Ser	Lys	Glu 70	Ala	Phe	Phe	Ser	Arg 75	Val	Glu	Thr	Phe	Ser 80
Ser	Leu	Lys	Trp	Ala 85	Gly	Lys	Pro	Phe	G1u 90	Leu	Ser	Pro	Leu	Val 95	Cys
Ala	Lys	Tyr	Gly 100	Trp	Val	Thr	Val	Glu 105	Сув	Asp	Met	Leu	Lys 110	Суз	Ser
Ser	Cys	Gln 115	Ala	Phe	Leu	Суз	Ala 120	Ser	Leu	Gln	Pro	Ala 125	Phe	Asp	Phe
Asp	Arg 130	Tyr	Lys	Gln	Arg	Cys 135	Ala	Glu	Leu	Lys	Lys 140	Ala	Leu	Cys	Thr
Ala 145	His	Glu	Lys	Phe	Cys 150		Trp	Pro	Asp	Ser 155	Pro	Ser	Pro	Asp	Arg 160
Phe	Gly	Met	Leu	Pro 165	Leu	Asp	Glu	Pro	Ala 170	Ile	Leu	Val	Ser	Glu 175	Phe
Leu	Asp	Arg	Phe 180	Gln	Ser	Leu	Cys	His 185	Leu	Asp	Leu	Gln	Leu 190	Pro	Ser
Leu	Arg	Pro 195	Glu	Asp	Leu	Lys	Thr 200	Met	Cys	Leu	Thr	Glu 205	Asp	Lys	Ile
Ser	Leu 210	Leu	Leu	His	Leu	Leu 215	Glu	Asp	Glu	Leu	Asp 220	His	Arg	Thr	Asp
Glu 225	Arg	Lys	Thr	Thr	Ile 230	Lys	Leu	Gly	Ser	Asp 235	Ile	Gln	Val	His	Val 240
Thr	Ala	Cys	Ile	Leu 245	Ser	Val	Cys	Gly	Trp 250	Ala	Cys	Ser	Ser	Ser 255	Leu
Glu	Ser	Met	Gln 260	Leu	Ser	Leu	Ile	Xaa 265	Cys	Ser	Gln	Cys	Met 270	Xaa	Lys
Val	Gly	Leu 275	Trp	Gly	Phe	Gln	Gln 280	Ile	Glu	Ser	Ser	Met 285	Thr	Asp	Leu

4127

Asp Ala Ser Leu Pro Asp Gln Leu Pro Asn Pro Arg Pro 290 295 300

<210> 4556

<211> 163

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4556

Xaa Glu Pro Lys Pro Ser Val Glu Pro Val Lys Ser Ile Ser Ser Met
1 5 10 15

Glu Leu Lys Thr Glu Pro Phe Asp Asp Phe Leu Phe Pro Ala Ser Ser 20 25 30

Arg Pro Ser Gly Ser Glu Thr Ala Arg Ser Val Pro Asp Met Asp Leu 35 40 45

Ser Gly Ser Phe Tyr Ala Ala Asp Trp Glu Pro Leu His Ser Gly Ser 50 55 60

Leu Gly Met Gly Pro Met Ala Gln Ser Trp Ser Pro Cys Ala Leu Arg 65 70 75 80

Trp Ser Pro Val Leu Pro Ala Ala Leu Leu Thr Arg Leu Pro Ser Ser 85 90 95

Ser Pro Thr Pro Arg Leu Thr Pro Ser Pro Ala Val Gln Leu Pro Thr
100 105 110

Ala Arg Ala Ala Ala Met Ser Leu Pro Leu Thr Arg Ser Ala His
115 120 125

Pro Arg Cys Trp Pro Cys Glu Gly Ala Gly Lys Gly Arg Gln Pro Ala 130 135 140

Pro Thr Ser Ala Thr Ala Arg Ala Gly Ala Leu Gln Arg Gly Glu Thr 145 150 155 160

His Leu Pro

4128

<210> 4557 <211> 89 <212> PRT

<213> Homo sapiens

<400> 4557

Gln Thr Ala Ser Val Trp Pro Cys Pro His Ser Tyr Met Ser Leu Ser 1 5 10 15

Thr Ser Thr Ser Leu Arg Ser Leu Thr Ser Arg Trp Thr Leu Tyr Ser 20 25 30

His Val His Leu Ile Pro Asp Glu Leu Trp Ser Tyr Leu Asp Ala Gln 35 40 45

Ile Arg Gly Phe Tyr Leu Ser Ile Gln Cys Ser Leu Arg Phe Gln Asp 50 55 60

Ile Ser Pro Gln Ala Leu Gly Phe Thr Leu Gly Ile Arg Arg Leu His 65 70 75 80

Val Ser Leu Glu Met Thr Cys Lys Ile 85

<210> 4558

<211> 353

<212> PRT

<213> Homo sapiens

<400> 4558

Gly Ser Leu Asp Leu Trp Arg Gly Ala Glu Leu Ser Pro Gly His Ser
1 5 10 15

Thr Leu Phe Thr Leu Cys Ala Cys Ala Lys Gly Ala Met Ala Ala Ser 20 25 30

Cys Val Leu Leu His Thr Gly Gln Lys Met Pro Leu Ile Gly Leu Gly 35 40 45

Thr Trp Lys Ser Glu Pro Gly Gln Val Lys Ala Ala Val Lys Tyr Ala 50 55 60

Leu Ser Val Gly Tyr Arg His Ile Asp Cys Ala Ala Ile Tyr Gly Asn 65 70 75 80

Glu Pro Glu Ile Gly Glu Ala Leu Lys Glu Asp Val Gly Pro Gly Lys
85 90 95

4129

Ala	Val	Pro	Arg 100	Glu	Glu	Leu	Phe	Val 105	Thr	Ser	Lys	Leu	Trp 110	Asn	Thr
Lys	His	His 115	Pro	Glu	Asp	Val	Glu 120	Pro	Ala	Leu	Arg	Lys 125	Thr	Leu	Ala
Asp	Leu 130	Gln	Leu	Glu	Tyr	Leu 135	Asp	Leu	Tyr	Leu	Met 140	His	Trp	Pro	Tyr
Ala 145	Phe	Glu	Arg	Gly	Asp 150	Asn	Pro	Phe	Pro	Lys 155	Asn	Ala	Asp	Gly	Thr 160
Ile	Cys	Tyr	Asp	Ser 165	Thr	His	Tyr	Lys	Glu 170	Thr	Trp	Lys	Ala	Leu 175	Glu
Ala	Leu	Val	Ala 180	Lys	Gly	Leu	Val	Gln 185	Ala	Leu	Gly	Leu	Ser 190	Asn	Phe
Asn	Ser	Arg 195	Gln	Ile	Asp	Asp	Ile 200	Leu	Ser	Val	Ala	Ser 205	Val	Arg	Pro
Ala	Val 210	Leu	Gln	Val	Glu	Cys 215	His	Pro	Tyr	Leu	Ala 220	Gln	Asn	Glu	Leu
Ile 225	Ala	His	Cys	Gln	Ala 230	Arg	Gly	Leu	Glu	Val 235	Thr	Ala	Tyr	Ser	Pro 240
Leu	Gly	Ser	Ser	Asp 245	Arg	Ala	Trp	Arg	Asp 250	Pro	Asp	Glu	Pro	Val 255	Leu
Leu	Glu	Glu	Pro 260	Val	Val	Leu	Ala	Leu 265	Ala	Glu	Lys	Tyr	Gly 270	Arg	Ser
Pro	Ala	Gln 275	Ile	Leu	Leu	Arg	Trp 280	Gln	Val	Gln	Arg	Lys 285	Val	Ile	Cys
Ile	Pro 290	Lys	Ser	Ile	Thr	Pro 295	Ser	Arg	Ile	Leu	Gln 300	Asn	Ile	Lys	Val
Phe 305	Asp	Phe	Thr	Phe	Ser 310	Pro	Glu	Glu	Met	Lys 315	Gln	Leu	Asn	Ala	Leu 320
Asn	Lys	Asn	Trp	Arg 325	Tyr	Ile	Val	Pro	Met 330	Leu	Thr	Val	Asp	Gly 335	Lys
Arg	Val	Pro	Arg 340	Asp	Ala	Gly	His	Pro 345	Leu	Tyr	Pro	Phe	Asn 350	Asp	Pro

Tyr

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<210> 4559
<211> 275
<212> PRT
<213> Homo sapiens
<220>
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<222> (271)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (272)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (273)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4559
Gly Arg Val Gly Gly Arg Val Gly Pro Arg Asp Pro Lys Ala Pro Gly
                                     10
Gln Phe Gly Arg Pro Val Val Pro His Gly Lys Glu Lys Glu Ala
                                 25
Glu Arg Arg Trp Lys Glu Gly Asn Phe Asn Val Tyr Leu Ser Asp Leu
         35
                             40
                                                  45
Ile Pro Val Asp Arg Ala Ile Glu Asp Thr Arg Pro Ala Gly Cys Ala
Glu Gln Leu Val His Asn Asn Leu Pro Thr Thr Ser Val Ile Met Cys
                     70
                                         75
Phe Val Asp Glu Val Trp Ser Thr Leu Leu Arg Ser Val His Ser Val
                 85
                                     90
Ile Asn Arg Ser Pro Pro His Leu Ile Lys Glu Ile Leu Leu Val Asp
            100
                                105
                                                     110
Asp Phe Ser Thr Lys Asp Tyr Leu Lys Asp Asn Leu Asp Lys Tyr Met
                                                 125
        115
                             120
Ser Gln Phe Pro Lys Val Arg Ile Leu Arg Leu Lys Glu Arg His Gly
                        135
Leu Ile Arg Ala Arg Leu Ala Gly Ala Gln Asn Ala Thr Gly Asp Val
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4131

150 155 160 145 Leu Thr Phe Leu Asp Ser His Val Glu Cys Asn Val Gly Trp Leu Glu 165 170 Pro Leu Leu Glu Arg Val Tyr Leu Ser Arg Lys Lys Val Ala Cys Pro 185 Val Ile Glu Val Ile Asn Asp Lys Asp Met Ser Tyr Met Thr Val Asp 200 195 Asn Phe Gln Arg Gly Ile Phe Val Trp Pro Met Asn Phe Gly Trp Arg 215 Thr Ile Pro Pro Asp Val Ile Ala Lys Asn Arg Ile Lys Glu Thr Asp 230 235 Thr Ile Arg Cys Pro Val Met Ala Gly Gly Ile Gly Phe Tyr Cys Gln 245 250 Lys Leu Phe Leu Asn Leu Glu His Thr Asn Pro Trp Pro Xaa Xaa 260 265 270 Xaa Trp Gly 275 <210> 4560 <211> 105 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (59) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4560 Ala His Leu Ala Ala Ser Leu Pro Leu Gln Ala Gln Pro Ser Ala Met 10 Ala Cys Pro Leu Asp Gln Ala Ile Gly Leu Leu Val Ala Ile Phe His 25 Lys Tyr Ser Gly Arg Glu Gly Asp Lys His Thr Leu Ser Lys Lys Glu 40 45 Leu Lys Glu Leu Ile Gln Lys Glu Leu Thr Xaa Gly Ser Lys Leu Gln 50 55 60

4132

Asp Ala Glu Ile Ala Arg Leu Met Glu Asp Leu Asp Arg Asn Lys Asp 65 70 75 80

Gln Glu Val Asn Phe Gln Glu Tyr Val Thr Phe Leu Gly Ala Leu Ala 85 90 95

Leu Ile Tyr Asn Glu Ala Leu Lys Gly
100 105

<210> 4561

<211> 176

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (146)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4561

Leu Thr Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Ala Ala Ala 1 5 10 15

Leu Glu Leu Val Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Ala Ala 20 25 30

Gly His Glu Lys Leu Pro Val His Val Glu Asp Ala Leu Thr Tyr Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Asp Gln Val Lys Ile Arg Phe Gly Ser Asp Pro Ala Thr Tyr Asn Gly
50 55 60

Phe Leu Glu Ile Met Lys Glu Phe Lys Ser Gln Ser Ile Asp Thr Pro 65 70 75 80

Gly Val Ile Arg Arg Val Ser Gln Leu Phe His Glu His Pro Asp Leu
85 90 95

Ile Val Gly Phe Asn Ala Phe Leu Pro Leu Gly Tyr Arg Ile Asp Ile
100 105 110

Pro Lys Asn Gly Lys Leu Asn Ile Gln Ser Pro Leu Thr Ser Gln Glu 115 120 125

Asn Ser His Asn His Gly Asp Gly Ala Glu Asp Phe Lys Gln Gln Val 130 135 140

4133

Glu Phe Asn Asn Ala Ile Ser Tyr Val Asn Lys Ile Lys Thr Arg Phe 165 170 175

<210> 4562

<211> 136

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4562

His Glu Xaa Arg Glu His Ala Gly Pro Lys Met Ala Ala Ser Arg Tyr
1 5 10 15

Arg Arg Phe Leu Lys Leu Cys Glu Glu Trp Pro Val Asp Glu Thr Lys
20 25 30

Arg Gly Arg Asp Leu Gly Ala Tyr Leu Arg Gln Arg Val Ala Gln Ala 35 40 45

Phe Arg Glu Gly Glu Asn Thr Gln Val Ala Glu Pro Glu Ala Cys Asp 50 55 60

Gln Met Tyr Glu Ser Leu Ala Arg Leu His Ser Asn Tyr Tyr Lys His 65 70 75 80

Lys Tyr Pro Arg Pro Arg Asp Thr Ser Phe Ser Gly Leu Ser Leu Glu 85 90 95

Glu Tyr Lys Leu Ile Leu Ser Thr Asp Thr Leu Glu Glu Leu Lys Glu
100 105 110

Ile Asp Lys Gly Met Trp Lys Lys Leu Gln Glu Lys Phe Ala Pro Lys
115 120 125

Gly Pro Glu Glu Asp His Lys Ala 130 135

<210> 4563

<211> 283

4134

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (41) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4563 Lys Arg Lys Ile Met Ile Lys Arg His Glu Val Glu Gln Asn Ile Arg Glu Glu Leu Asn Lys Lys Arg Thr Gln Lys Glu Met Glu His Ala 25 20 Met Leu Ile Arg His Asp Glu Ser Xaa Arg Glu Leu Glu Tyr Arg Gln 40 35 Leu His Thr Leu Gln Lys Leu Arg Met Asp Leu Ile Arg Leu Gln His Gln Thr Glu Leu Glu Asn Gln Leu Glu Tyr Asn Lys Arg Arg Glu Arg 75 70 Glu Leu His Arg Lys His Val Met Glu Leu Arg Gln Gln Pro Lys Asn 85 90 95 Leu Lys Ala Met Xaa Met Gln Ile Lys Lys Gln Phe Gln Asp Thr Cys 100 105 Lys Val Gln Thr Lys Gln Tyr Lys Ala Leu Lys Asn His Gln Leu Glu 120 Val Thr Pro Lys Asn Glu His Lys Thr Ile Leu Lys Thr Leu Lys Asp 135 140 Glu Gln Thr Arg Lys Leu Ala Ile Leu Ala Glu Gln Tyr Glu Gln Ser 145 150 155 Ile Asn Glu Met Met Ala Ser Gln Ala Leu Arg Leu Asp Glu Ala Gln 165 170 Glu Ala Glu Cys Gln Ala Leu Arg Leu Gln Leu Gln Glu Met Glu 185 Leu Leu Asn Ala Tyr Gln Ser Lys Ile Lys Met Gln Thr Glu Ala Gln

4135

195 200 205 His Glu Arg Glu Leu Gln Lys Leu Glu Gln Arg Val Ser Leu Arg Arg 215 Ala His Leu Glu Gln Lys Ile Glu Glu Leu Ala Ala Leu Gln Lys 235 230 Glu Arg Ser Glu Arg Ile Lys Asn Leu Leu Glu Arg Gln Glu Arg Glu 245 250 Ile Glu Thr Phe Asp Met Glu Ser Leu Arg Met Gly Phe Gly Asn Leu Val Thr Leu Asp Phe Pro Lys Glu Asp Tyr Arg 280 <210> 4564 <211> 465 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (203) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (460) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (461) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4564 Lys Asn Met Glu Thr Glu Gln Pro Glu Glu Thr Phe Pro Asn Thr Glu 10 Thr Asn Gly Glu Phe Gly Lys Arg Pro Ala Glu Asp Met Glu Glu Glu 20 25 Gln Ala Phe Lys Arg Ser Arg Asn Thr Asp Glu Met Val Glu Leu Arg 35 40 Ile Leu Leu Gln Ser Lys Asn Ala Gly Ala Val Ile Gly Lys Gly Gly 55 60

Lys 65	Asn	Ile	Lys	Ala	Leu 70	Arg	Thr	Asp	Tyr	Asn 75	Ala	Ser	Val	Ser	Val 80
Pro	Asp	Ser	Ser	Gly 85	Pro	Glu	Arg	Ile	Leu 90	Ser	Ile	Ser	Ala	Asp 95	Ile
Glu	Thr	Ile	Gly 100	Glu	Ile	Leu	Lys	Lys 105	Ile	Ile	Pro	Thr	Leu 110	Glu	Glu
Gly	Leu	Gln 115	Leu	Pro	Ser	Pro	Thr 120	Ala	Thr	Ser	Gln	Leu 125	Pro	Leu	Glu
Ser	Asp 130	Ala	Val	Glu	Cys	Leu 135	Asn	Tyr	Gln	His	Tyr 140	Lys	Gly	Ser	Asp
Phe 145	Asp	Cys	Glu	Leu	Arg 150	Leu	Leu	Ile	His	Gln 155	Ser	Leu	Ala	Gly	Gly 160
Ile	Ile	Gly	Val	Lys 165	Gly	Ala	Lys	Ile	Lys 170	Glu	Leu	Arg	Glu	Asn 175	Thr
Gln	Thr	Thr	Ile 180	Lys	Leu	Phe	Gln	Glu 185	Cys	Суз	Pro	His	Ser 190	Thr	Asp
Arg	Val	Val 195	Leu	Ile	Gly	Gly	Lys 200	Pro	Asp	Xaa	Val	Val 205	Glu	Cys	Ile
Lys	Ile 210	Ile	Leu	Asp	Leu	Ile 215	Ser	Glu	Ser	Pro	Ile 220	Lys	Gly	Arg	Ala
Gln 225	Pro	Tyr	Asp	Pro	Asn 230	Phe	Tyr	Asp	Glu	Thr 235	Tyr	Asp	Tyr	Gly	Gly 240
Phe	Thr	Met	Met	Phe 245	Asp	Asp	Arg	Arg	Gly 250	Arg	Pro	Val	Gly	Phe 255	Pro
Met	Arg	Gly	Arg 260	Gly	Gly	Phe	Asp	Arg 265	Met	Pro	Pro	Gly	Arg 270	Gly	Gly
Arg	Pro	Met 275	Pro	Pro	Ser	Arg	Arg 280	Asp	Tyr	Asp	Asp	Met 285	Ser	Pro	Arg
Arg	Gly 290	Pro	Pro	Pro	Pro	Pro 295	Pro	Gly	Arg	Gly	Gly 300	Arg	Gly	Gly	Ser
Arg 305	Ala	Arg	Asn	Leu	Pro 310	Leu	Pro	Pro	Pro	Pro 315	Pro	Pro	Arg	Gly	Gly 320
Asp	Leu	Met	Ala	Туr 325	Asp	Arg	Arg	Gly	Arg 330	Pro	Gly	Asp	Arg	Туr 335	Asp

4137

Gly Met Val Gly Phe Ser Ala Asp Glu Thr Trp Asp Ser Ala Ile Asp 340 345 350 Thr Trp Ser Pro Ser Glu Trp Gln Met Ala Tyr Glu Pro Gln Gly Gly 355 360 Ser Gly Tyr Asp Tyr Ser Tyr Ala Gly Gly Arg Gly Ser Tyr Gly Asp Leu Gly Gly Pro Ile Ile Thr Thr Gln Val Thr Ile Pro Lys Asp Leu 390 395 Ala Gly Ser Ile Ile Gly Lys Gly Gln Arg Ile Lys Gln Ile Arg 410 405 His Glu Ser Gly Ala Ser Ile Lys Ile Asp Glu Pro Leu Glu Gly Ser 425 Glu Asp Arg Ile Ile Thr Ile Thr Gly Thr Gln Asp Gln Ile Gln Asn 440 Ala Gln Tyr Leu Leu Gln Asn Ser Val Ser Ser Xaa Xaa Leu Ala Leu 450 455 460 Cys 465 <210> 4565 <211> 82 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (82) <223> Xaa equals any of the naturally occurring L-amino acids Gln Leu Gly Pro Val Val Gly Gly Trp Tyr Lys Val Leu Asp Arg Phe 5 Ile Pro Gly Thr Thr Lys Val Asp Ala Leu Lys Lys Met Leu Leu Asp 25 Gln Gly Gly Phe Ala Pro Cys Phe Leu Gly Cys Phe Leu Pro Leu Val 40 Gly Ala Leu Asn Gly Leu Ser Ala Gln Asp Asn Trp Pro Asn Tyr Ser

4138

50 55 60

Gly Ile Ile Leu Met Pro Leu Ser Pro Thr Thr Ile Tyr Gly Leu Leu 65 70 75 80

Cys Xaa

<210> 4566

<211> 63

<212> PRT

<213> Homo sapiens

<400> 4566

Glu Gln Lys Ser Ile Gln Asp Leu Gln Ala Leu Leu Trp Met Arg Leu 1 5 10 15

Ile Thr Met Glu Ala Ser Asn Thr His Leu Ser Met Ala Leu Ile Phe 20 25 30

Ser Thr Ser Trp Pro Leu Lys Met Thr Tyr Asn Phe Ser Val Cys Phe 35 40 45

Thr Ile Phe Tyr Lys Glu Asn Ser Ile Leu Trp Leu Ile Glu His
50 55 60

<210> 4567

<211> 73

<212> PRT

<213> Homo sapiens

<400> 4567

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Gln Arg Arg Gly Gly
1 5 10 15

Val Arg Glu Asn Met Leu Val Lys Tyr Ala Gly Arg Leu Gly Asp Thr 20 25 30

Lys Gln Arg Phe Arg His Ser Lys Ala Gly Met Arg Ser Ser Lys Leu
35 40 45

Cys Phe Asn Lys Leu His Trp Arg Val Pro Tyr Ser Leu Lys Phe Gly 50 55 60

Asn His Asp Pro Glu Pro Gly Trp Ala 65 70

4139

<210> 4568 <211> 98 <212> PRT <213> Homo sapiens <400> 4568 Arg Thr Lys Asn Lys Thr Leu Ile Pro Thr Phe Ile Ser Thr Leu Ala 5 Lys Thr Gly Leu Ala Phe Phe Ser Asn Ser Ser Phe Ile Ser Ser Leu 25 20 Pro Cys Pro Ser Leu Pro Phe Leu Ser Gly Ile Gly Ser Val Leu Pro 40 Ile His Met Ala Ala Ser Leu Ile Ala Leu Val Gln Gly Ile Arg Tyr 55 Cys Ala Phe Trp Cys Gln Val Gln Ser Gln Val Pro Ile Tyr Glu Pro 70 65 75 Val Tyr Lys Lys Lys Ile Gln Val Phe Glu Gly Glu Thr Leu His 85 90 Cys Glu <210> 4569 <211> 122 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (90) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4569 Ala Leu Gly Phe Ser Ala Glu Gly Ala Pro Phe Pro Leu Asp Gly Ser Cys His Val Ile Phe Glu Asn Ser Trp Thr Ala Pro Glu Glu Ala Leu

25

Phe Ser Ser Arg Lys Leu Asp Gly Gly Ser Gln Lys Trp Leu Ile Gly

40

4140

Arg Gly Gln Ala Ser Phe Gln Gly Ser Ala Val Pro Ser Trp Phe Arg 50 55 60

Glu Gly Arg Ala Trp Leu Ser Leu Ala Leu Ser Leu Ser Pro Cys Leu 65 70 75 80

Ser Ile Thr Thr Phe Pro Pro Glu Glu Xaa Asn Tyr Leu Pro Cys Lys 85 90 95

Ala Arg Phe Tyr Thr Asp Phe Thr Asn Cys Ala Lys Asn Arg Pro Cys
100 105 110

Ser Gln Lys Ala Gln Cys Phe Cys Lys Glu 115 120

<210> 4570

<211> 89

<212> PRT

<213> Homo sapiens

<400> 4570

Pro Ser Cys Gln Arg Pro Lys Ser Val Ser Trp Cys His Val His Thr 1 5 10 15

Pro Cys His Phe Thr Leu His Leu Ser Pro Ser Phe Pro Met His Ala 20 25 30

Tyr Ser Glu His Pro Cys Val Gly Pro Ser Ser Ala Ser Arg Ala Cys 35 40 45

Ser Ala Val Gly Leu Phe Cys Gly Arg Lys Glu Ala Val Ser Ala Phe 50 55 60

Ser Asp Gly Thr Gly Val Glu Gly Arg Ser Cys Ile Val Ala Leu Leu 65 70 75 80

Asn Ser Pro Phe Cys Ser Ile Leu Val 85

<210> 4571

<211> 148

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

4141

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (52) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids Ser Asn Val Ile Arg Asn Glu Gln Leu Pro Leu Gln Tyr Leu Ala Asp 10 Val Asp Thr Ser Asp Glu Glu Ser Ile Arg Ala His Val Met Ala Ser His His Ser Lys Arg Arg Gly Arg Ala Ser Ser Glu Ser Gln Gly Leu 40 Gly Ala Xaa Xaa Arg Thr Xaa Ala Asp Val Glu Glu Ala Leu Arg 50 55 Arg Lys Leu Glu Glu Leu Thr Ser Asn Val Ser Asp Gln Glu Thr Ser 65 70 Ser Glu Glu Glu Glu Ser Lys Asp Glu Lys Ala Glu Pro Asn Arg Asp 85 90 Lys Ser Val Gly Pro Leu Pro Gln Ala Asp Pro Glu Val Ala Arg Leu 105 110 Pro Ile Lys Pro Thr Asp Arg Lys Lys Ala Pro Arg Thr Leu Gly Thr 115 120 Pro Ser Ser Thr Thr Gly Pro Gln Met Arg Ser Cys Gln Ser Trp Arg 130 135 140 Thr Glu Trp Gln 145

<210> 4572

<211> 231

<212> PRT

<213> Homo sapiens

<400> 4572

4142

Ala Leu Ser Pro Ala Met Val Val Pro Glu Asp Gln Leu Thr Arg Trp His Pro Arg Phe Asn Val Asp Glu Val Pro Asp Ile Glu Pro Ala Ala 25 20 Leu Pro Gln Pro Pro Ala Thr Glu Lys Leu Thr Thr Ala Gln Glu Val 35 40 Leu Ala Arg Ala Arg Asn Leu Ile Ser Pro Arg Met Glu Lys Ala Leu Ser Gln Leu Ala Leu Arg Ser Ala Ala Pro Ser Ser Pro Gly Ser Pro Arg Pro Ala Leu Pro Ala Thr Pro Pro Ala Thr Pro Pro Ala Ala Ser 90 Pro Ser Ala Leu Lys Gly Val Ser Gln Asp Leu Leu Glu Arg Ile Arg 100 105 Ala Lys Glu Ala Gln Lys Gln Leu Ala Gln Met Thr Arg Cys Pro Glu Gln Glu Gln Arg Leu Gln Arg Leu Glu Arg Leu Pro Glu Leu Ala Arg 135 Val Leu Arg Ser Val Phe Val Ser Glu Arg Lys Pro Ala Leu Ser Met 155 160 145 150 Glu Val Ala Cys Ala Arg Met Val Gly Ser Cys Cys Thr Ile Met Ser 170 165 Pro Gly Glu Met Glu Lys His Leu Leu Leu Leu Ser Glu Leu Leu Pro 185 Asp Trp Leu Ser Leu His Arg Ile Arg Thr Asp Thr Tyr Val Lys Leu 195 200 205 Asp Lys Ala Ala Asp Leu Ala His Ile Thr Ala Arg Leu Ala His Gln 220 210

Thr Arg Ala Glu Glu Gly Leu

230

<210> 4573 <211> 102

<212> PRT

<213> Homo sapiens

4143

<400> 4573 Asp Pro Arg Val Arg His Ala Ser Gly Gly Phe Ser Leu Gly Gly Gln Thr Lys Trp Gln Trp Gly Pro Gly Cys Pro Leu Leu Arg Asn Gly Glu 25 Leu Phe Ser Pro Val Leu Leu Trp Gly Leu Pro Cys Gly Thr Lys Cys 40 45 Leu Gly Glu Glu Leu Leu Ala Gly Leu Gln Leu Leu Phe Val Arg Gly 55 Gln Leu Gly Leu Val His Pro Cys Ser Glu Leu Ala Pro Lys Arg Ala Met Leu Asn Ser Ser Pro Ser Pro Ser Arg Gln Pro Leu Ser Leu His 90 Ala Arg Gly Ile Gln Leu 100 <210> 4574 <211> 88 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (43) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (88) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4574 Arg Ser Ile Gly Gly Phe Phe Pro Ala Gly Leu Thr Thr Leu Leu Ser 10 15 Gly Leu Lys Pro Phe His Thr Phe Ile Leu Phe Phe Asn Gln Lys Ser Phe Ser Tyr Lys Ile Asn Phe Gly Gln Thr Xaa Lys Lys Lys Lys 40

Lys Lys Lys Gly Gly Pro Xaa <210> 4575 <211> 240 <212> PRT <213> Homo sapiens <400> 4575 Pro Thr Ala His Cys Arg Arg Leu Gly Ala Ala Glu Ala Arg Gly Ala Arg Ser Trp Arg Leu Pro Val Pro Arg Leu Cys Arg Pro His Ser Arg Gly Ala Lys Gly Gly Arg Pro Ala Ser Gly Pro Leu Pro Ser Leu Ser Leu Arg Cys Cys Glu Arg Arg Pro Leu Arg Arg Pro Ala Thr Gly Ala Met Ser Ala Asn Glu Asp Gln Glu Met Glu Leu Glu Ala Leu Arg Ser Ile Tyr Glu Gly Asp Glu Ser Phe Arg Glu Leu Ser Pro Val Ser Phe Gln Tyr Arg Ile Gly Glu Asn Gly Asp Pro Lys Ala Phe Leu Ile Glu Ile Ser Trp Thr Glu Thr Tyr Pro Gln Thr Pro Pro Ile Leu Ser Met Asn Ala Phe Phe Asn Asn Thr Ile Ser Ser Ala Val Lys Gln Ser Ile Leu Ala Lys Leu Gln Glu Ala Val Glu Ala Asn Leu Gly Thr Ala Met Thr Tyr Thr Leu Phe Glu Tyr Ala Lys Asp Asn Lys Glu Gln Phe Met Glu Asn His Asn Pro Ile Asn Ser Ala Thr Ser Ile Ser Asn Ile

4145

Ile Ser Ile Glu Thr Pro Asn Thr Ala Pro Ser Ser Lys Lys Lys Asp 195 200 205

Lys Lys Glu Gln Leu Ser Lys Ala Gln Lys Arg Asn Trp Gln Thr Lys 210 215 220

Gln Ile Thr Lys Glu Asn Phe Leu Glu Ala Gly Thr Gly Leu Met Leu 225 230 235 240

<210> 4576

<211> 89

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4576

Asp Ala Trp Xaa Xaa Lys Lys Glu Lys Glu Lys Glu Lys Arg Lys
1 5 10 15

Gly Thr Ser Asp Met Thr Ala Cys Met Lys Ser Asn Arg Val Thr Pro 20 25 30

Val Lys Leu Lys Ser Arg Ala Val Asp Ile Leu Ser Asn Gln Gln Glu
35 40 45

Val Ser Arg Asn Gln Ala Val Gln Leu Leu Ser Ala Ile Val Ser 50 55 60

Ser Gln Lys Met His Asp Asp Gly Val Val Gly Glu Gly Gln Phe Ser 65 70 75 80

Ile Leu Phe Lys Ser Lys Leu Pro Glu

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<210> 4577
<211> 115
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4577
Pro Thr Arg Pro Met Val Ser Ser Ile Gln Ala Ser Met Asp Arg His
Leu Arg Asp Gln Ser Thr Glu Gln Ser Pro Ser Asp Leu Pro Gln Arg
             20
                                 25
Xaa Thr Glu Val Val Ser Ser Ser Ala Lys Ser Gly Ser Leu Gln Thr
                                                 45
         35
                             40
Gly Leu Pro Glu Ser Phe Pro Leu Thr Gly Gly Thr Glu Asn Leu Asn
                        55
Thr Glu Thr Thr Asp Gly Cys Val Ala Asp Ala Leu Gly Ala Ala Phe
                     70
 65
                                         75
Ala Thr Arg Ser Lys Ala Gln Arg Gly Asn Ser Val Glu Glu Leu Glu
                                     90
Glu Met Asp Ser Gln Asp Ala Glu Met Thr Asn Thr Thr Glu Pro Met
                                                     110
            100
                                105
Asp His Ser
       115
<210> 4578
<211> 116
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids
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4147

<400> 4578 Leu Lys Asn His Gln Lys Thr His Thr Ser Glu Lys Ser Tyr Lys Cys Asn Glu Cys Arg Lys Ala Phe Ser Tyr Cys Ser Gly Leu Ile Gln Cys 25 Gln Val Ile His Thr Ile Glu Lys Pro Tyr Glu Tyr Gly Lys Cys Gly 40 45 35 Lys Ala Phe Arg Gln Arg Thr Asp Leu Lys Lys His Gln Lys Met His 55 Thr Glu Glu Lys Pro Tyr Glu Cys Asn Glu Cys Gly Lys Ala Phe Ser 70 Gln Ser Thr Tyr Leu Thr Lys His Gln Lys Ile His Ser Glu Glu Lys 90 85 Ser Asn Ile His Thr Glu Cys Gly Glu Thr Xaa Xaa Gln Asn Ser Ser 100 105 110 Phe Leu Gln Gln 115 <210> 4579 <211> 598 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4579 Ala Thr Ser Arg Gln Pro Ser Tyr Xaa Arg Thr Trp Cys Arg Arg Cys 10 Cys Leu Pro Leu Ala Leu Asn Pro Val Pro Ala Ala Met Ala Pro Gly 25 Gln Leu Ala Leu Phe Ser Val Ser Asp Lys Thr Gly Leu Val Glu Phe

Ala Arg Asn Leu Thr Ala Leu Gly Leu Asn Leu Val Ala Ser Gly Gly Thr Ala Lys Ala Leu Arg Asp Ala Gly Leu Ala Val Arg Asp Val Ser Glu Leu Thr Gly Phe Pro Glu Met Leu Gly Gly Arg Val Lys Thr Leu His Pro Ala Val His Ala Gly Ile Leu Ala Arg Asn Ile Pro Glu Asp Asn Ala Asp Met Ala Arg Leu Asp Phe Asn Leu Ile Arg Val Val Ala Cys Asn Leu Tyr Pro Phe Val Lys Thr Val Ala Ser Pro Gly Val Xaa Val Glu Glu Ala Val Glu Gln Ile Asp Ile Gly Gly Val Thr Leu Leu Arg Ala Ala Lys Asn His Ala Arg Val Thr Val Val Cys Glu Pro Glu Asp Tyr Val Val Ser Thr Glu Met Gln Ser Ser Glu Ser Lys Asp Thr Ser Leu Glu Thr Arg Arg Gln Leu Ala Leu Lys Ala Phe Thr His Thr Ala Gln Tyr Asp Glu Ala Ile Ser Asp Tyr Phe Arg Lys Gln Tyr Ser Lys Gly Val Ser Gln Met Pro Leu Arg Tyr Gly Met Asn Pro His Gln Thr Pro Ala Gln Leu Tyr Thr Leu Gln Pro Lys Leu Pro Ile Thr Val Leu Asn Gly Ala Pro Gly Phe Ile Asn Leu Cys Asp Ala Leu Asn Ala Trp Gln Leu Val Lys Glu Leu Lys Glu Ala Leu Gly Ile Pro Ala Ala Ala Ser Phe Lys His Val Ser Pro Ala Gly Ala Ala Val Gly Ile Pro Leu Ser Glu Asp Glu Ala Lys Val Cys Met Val Tyr Asp Leu

305					310					315					320
Tyr	Lys	Thr	Leu	Thr 325	Pro	Ile	Ser	Ala	Ala 330	Tyr	Ala	Arg	Ala	Arg 335	Gly
Ala	Asp	Arg	Met 340	Ser	Ser	Phe	Gly	Asp 345	Phe	Val	Ala	Leu	Ser 350	Asp	Val
Суѕ	Asp	Val 355	Pro	Thr	Ala	Lys	Ile 360	Ile	Ser	Arg	Glu	Val 365	Ser	Asp	Gly
Ile	Ile 370	Ala	Pro	Gly	Tyr	Glu 375	Glu	Glu	Ala	Leu	Thr 380	Ile	Leu	Ser	Lys
Lys 385	Lys	Asn	Gly	Asn	Tyr 390	Cys	Val	Leu	Gln	Met 395	Asp	Gln	Ser	Tyr	Lys 400
Pro	Asp	Glu	Asn	Glu 405	Val	Arg	Thr	Leu	Phe 410	Gly	Leu	His	Leu	Ser 415	Gln
Lys	Arg	Asn	Asn 420	Gly	Val	Val	Asp	Lys 425	Ser	Leu	Phe	Ser	Asn 430	Val	Val
Thr	Lys	Asn 435	Lys	Asp	Leu	Pro	Glu 440	Ser	Ala	Leu	Arg	Asp 445	Leu	Ile	Val
Ala	Thr 450	Ile	Ala	Val	Lys	Tyr 455	Thr	Gln	Ser	Asn	Ser 460	Val	Cys	Tyr	Ala
Lys 465	Asn	Gly	Gln	Val	Ile 470	Gly	Ile	Gly	Ala	Gly 475	Gln	Gln	Ser	Arg	Ile 480
His	Cys	Thr	Arg	Leu 485	Ala	Gly	Asp	Lys	Ala 490	Asn	Tyr	Trp	Trp	Leu 495	Arg
His	His	Pro	Gln 500	Val	Leu	Ser	Met	Lys 505		Lys	Thr	Gly	Val 510	Lys	Arg
Ala	Glu	Ile 515	Ser	Asn	Ala	Ile	Asp 520	Gln	Tyr	Val	Thr	Gly 525	Thr	Ile	Gly
Glu	Asp 530	Glu	Asp	Leu	Ile	Lys 535	Trp	Lys	Ala	Leu	Phe 540	Glu	Glu	Val	Pro
Glu 545	Leu	Leu	Thr	Glu	Ala 550	Glu	Lys	Lys	Glu	Trp 555	Val	Glu	Lys	Leu	Thr 560
Glu	Val	Ser	Ile	Ser 565	Ser	Asp	Ala	Phe	Phe 570	Pro	Phe	Arg	Asp	Asn 575	Val
Asp	Arg	Ala	Lys	Arg	Ser	Gly	Val	Ala	Tyr	Ile	Ala	Ala	Pro	Pro	Val

4150

580 585 590

Leu Leu Leu Thr Lys Leu 595

<210> 4580

<211> 48

<212> PRT

<213> Homo sapiens

<400> 4580

Cys Ile Ser Lys Gly Glu Lys Arg Ile Gly Ile Phe Leu Phe Asn Ile 1 5 10 15

Gln Phe Ile Glu Ser Ser Thr Leu Ile Phe Leu Asn Pro Arg Ser Ser 20 25 30

Gly Ser Tyr His Phe Lys Arg Asn Tyr His Gln Phe Cys Val Ser Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

<210> 4581

<211> 50

<212> PRT

<213> Homo sapiens

<400> 4581

His Val Phe Leu Pro Cys Ser Leu Pro Gly Arg Met Glu Phe Tyr Ile
1 5 10 15

Thr Thr Phe Leu Cys Lys Asn Asn Gly Arg Val Glu Leu Val Val Ile 20 . 25 30

Leu Ala Phe His Leu Ala Leu Val Ser Ser Ile Gly Leu Glu Ile Ile 35 40 45

Gly Arg 50

<210> 4582

<211> 45

<212> PRT

<213> Homo sapiens

4151

<400> 4582

Gly Leu Met Glu Ile Glu Ile Thr Cys Lys Asp Ile Thr Val Phe Met 1 5 10 15

Ser Tyr Ile Leu Val Leu Glu Ile Val Glu Cys Met Ile Asp Asn Ile 20 25 30

Phe Leu Ile Phe Ile Phe Ser Ser Asn Thr Ser Thr Val 35 40 45

<210> 4583

<211> 125

<212> PRT

<213> Homo sapiens

<400> 4583

Asn Asp Ser Asn Thr Ala Leu Leu His His Glu Thr Asn Pro Gly Gln 1 5 10 15

Asp Pro Ile Pro Ser His Gln Pro Thr Ser Leu Leu Ala Ala Gly Gln
20 25 30

Asp Val Ala Ser Ile Thr Phe His Cys Leu Ser Pro Trp Glu Ala Ala 35 40 45

Gln Leu Arg Leu Gly Thr Arg Pro Pro Leu Leu Gly Pro Thr Gly Lys
50 55 60

Ser Val Ala Ala Thr Ala Trp Leu Thr Phe Leu Ser Ser Leu Gly Ser 65 70 75 80

Gly Thr Ala Pro Pro Cys Pro Trp Leu Gly Arg Gly Glu Lys Lys Leu 85 90 95

Ser Tyr Ala Phe Pro Leu Pro Leu Val Tyr Arg Thr Ser Leu Pro Ser 100 105 110

Gln Gln Glu Arg Arg Pro Pro Gly Val Ser Pro Gly Gln 115 120 125

<210> 4584

<211> 342

<212> PRT

<213> Homo sapiens

<220>

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<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (25)
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<223> Xaa equals any of the naturally occurring L-amino acids
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<222> (45)
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<222> (47)
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<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids
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<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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4153

<222> (60) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (61) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (279) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4584 Ile Thr Trp Pro Thr Thr Gly Pro Xaa Ala Leu Asn Leu Gln Ala His Trp Xaa Gly Pro Gly Ser Ala Arg Xaa Ala Xaa His His Leu Glu Tyr 25 Arg Cys Ala Pro Arg Pro Pro Ala Val Cys Trp His Xaa Val Xaa Arg 45 35 40 Gly Ala Lys Xaa Xaa Ala Xaa Ala Gln Ser Xaa Xaa Xaa Asp Thr Cys 55 Ser Val Gln Asn Gly Glu Asp Asp Gly Arg Asn Gln Ala Arg Leu Gly His Arg Gly Thr Leu Ala Leu Gly Ser Leu Leu Ala Gln Gly Phe Asn 90 95 85 Val Arg Leu Ser Gly Gln Asp Val Gly Arg Gly Thr Phe Ser Gln Arg 100 105 His Ala Met Val Val Cys Gln Glu Thr Asp Asp Thr Tyr Ile Pro Leu Asn His Met Asp Pro Asn Gln Lys Gly Phe Leu Glu Val Ser Asn Ser 135 140 Pro Leu Ser Glu Glu Ala Val Leu Gly Phe Glu Tyr Gly Met Ser Ile 155 160 145 150 Glu Ser Pro Lys Leu Peo Leu Trp Glu Ala Gln Phe Gly Asp Phe 165 170 Phe Asn Gly Ala Gln Ile Ile Phe Asp Thr Phe Ile Ser Gly Glu 185 Ala Lys Trp Leu Leu Gln Ser Gly Ile Val Ile Leu Leu Pro His Gly

4154

205 195 200 Tyr Asp Gly Ala Gly Pro Asp His Ser Ser Cys Arg Ile Glu Arg Phe 215 Leu Gln Met Cys Asp Ser Ala Glu Glu Gly Val Asp Gly Asp Thr Val 230 235 Asn Met Phe Val Val His Pro Thr Thr Pro Ala Gln Tyr Phe His Leu 255 250 245 Leu Arg Arg Gln Met Val Arg Asn Phe Arg Lys Pro Leu Ile Val Ala 260 265 Ser Pro Lys Met Leu Leu Xaa Leu Pro Ala Ala Val Ser Thr Leu Gln Glu Met Ala Pro Gly Thr Thr Phe Asn Pro Val Ile Gly Asp Ser Ser 295 300 Val Asp Pro Lys Lys Val Lys Thr Leu Val Phe Cys Ser Gly Lys His 305 310 315 Phe Tyr Ser Leu Val Asn Lys Glu Asn Leu Trp Gly Pro Arg Ser Met 325 330 Thr Leu Pro Ser Ser Glu 340 <210> 4585 <211> 59 <212> PRT <213> Homo sapiens <400> 4585 Asn Leu Tyr Lys Leu Lys Leu Asn His Glu Leu Gln Lys Lys Ser Ile Leu Pro Lys Leu Asp Val Thr Thr Leu Thr Ser Leu Lys Tyr Glu Val 25 Asp Cys Leu Lys Asp Ser Ala Tyr Ile Leu Val Cys Thr Phe Arg Asn 35 40 45 Ile Phe Leu Gly Lys Ser Thr Gln His Phe Leu 50 55

4155

<210> 4586 <211> 98 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (40) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (66) <223> Xaa equals any of the naturally occurring L-amino acids <221> SITE <222> (90) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4586 Val His Leu Lys Ala Val Lys Met Val Leu Ala Asp Leu Gly Arg Lys Ile Thr Ser Ala Leu Arg Ser Leu Ser Asn Ala Thr Ile Ile Asn Glu 25 Glu Val Cys Lys Ile Leu Tyr Xaa Ile Tyr Met Ile Val Leu Leu Ser 35 40 Leu Ala Leu Gly Arg Trp Leu Ile His Asn Pro Arg Ile Tyr Met Tyr Phe Xaa Val Asp Leu Ile Leu Val Gly Lys Ser Pro Lys Gly Leu Thr 70 75 Val Gly Gly Val Tyr Trp Gly Ile Thr Xaa Asn Ser Asn Tyr Phe Asn 85 90 Leu Pro

<210> 4587 <211> 72 <212> PRT <213> Homo sapiens <220> <221> SITE

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<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (42)
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<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4587
Gly Lys Leu Gly Met Leu Gly Gln Glu Gly Lys Val Leu Val Asn Pro
                                     10
Leu Trp Ser Asn Ile Met Lys Val Asn Tyr Asn Ser Ile Tyr Leu Ser
             20
                                 25
                                                      30
Leu Met Pro Gln Ser Glu Ile Xaa Tyr Xaa Leu Gly Gly His Gly Cys
         35
                             40
Ala Pro Ile Gln Tyr Thr Phe Xaa Gly Xaa Asn Leu Phe Ser Asp His
                                              60
Phe Met Glu Ser Leu Lys Tyr Leu
 65
                     70
<210> 4588
<211> 385
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (221)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4588
Trp Ile Pro Arg Ala Ala Gly Phe Gly Thr Arg Pro Leu Pro Gly Ala
                                     10
Ala Gly Gly Ala Ala Gly Cys Thr Gln Arg Arg Ser Arg Glu Leu Ala
```

Ala Ala Met Ser His Gln Thr Gly Ile Gln Ala Ser Glu Asp Val Lys Glu Ile Phe Ala Arg Ala Arg Asn Gly Lys Tyr Arg Leu Leu Lys Ile Ser Ile Glu Asn Glu Gln Leu Val Ile Gly Ser Tyr Ser Gln Pro Ser Asp Ser Trp Asp Lys Asp Tyr Asp Ser Phe Val Leu Pro Leu Leu Glu Asp Lys Gln Pro Cys Tyr Ile Leu Phe Arg Leu Asp Ser Gln Asn Ala Gln Gly Tyr Glu Trp Ile Phe Ile Ala Trp Ser Pro Asp His Ser His Val Arg Gln Lys Met Leu Tyr Ala Ala Thr Arg Ala Thr Leu Lys Lys Glu Phe Gly Gly His Ile Lys Asp Glu Val Phe Gly Thr Val Lys Glu Asp Val Ser Leu His Gly Tyr Lys Lys Tyr Leu Leu Ser Gln Ser Ser Pro Ala Pro Leu Thr Ala Ala Glu Glu Leu Arg Gln Ile Lys Ile Asn Glu Val Gln Thr Asp Val Gly Val Asp Thr Lys His Gln Thr Leu Gln Gly Val Ala Phe Pro Ile Ser Arg Glu Xaa Phe Gln Ala Leu Glu Lys Leu Asn Asn Arg Gln Leu Asn Tyr Val Gln Leu Glu Ile Asp Ile Lys Asn Glu Ile Ile Leu Ala Asn Thr Thr Asn Thr Glu Leu Lys Asp Leu Pro Lys Arg Ile Pro Lys Asp Ser Ala Arg Tyr His Phe Phe Leu Tyr Lys His Ser His Glu Gly Asp Tyr Leu Glu Ser Ile Val Phe Ile Tyr Ser Met Pro Gly Tyr Thr Cys Ser Ile Arg Glu Arg

4158

295 300 290 Met Leu Tyr Ser Ser Cys Lys Ser Arg Leu Leu Glu Ile Val Glu Arg 310 315 Gln Leu Gln Met Asp Val Ile Arg Lys Ile Glu Ile Asp Asn Gly Asp 330 Glu Leu Thr Ala Asp Phe Leu Tyr Glu Glu Val His Pro Lys Gln His 350 340 345 Ala His Lys Gln Ser Phe Ala Lys Pro Lys Gly Pro Ala Gly Lys Arg 355 360 Gly Ile Arg Arg Leu Ile Arg Gly Pro Ala Glu Thr Glu Ala Thr Thr 375 380 Asp 385 <210> 4589 <211> 270 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (45) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4589 Ser Val Thr Leu Glu Met Glu Ser Lys Leu Ala Ala Glu Lys Lys Gln 10 Thr Glu Gln Leu Ser Leu Glu Leu Glu Val Ala Arg Leu Gln Leu Gln 20 25 Gly Leu Asp Leu Ser Ser Arg Ser Leu Leu Gly Ile Xaa Thr Glu Asp 35 40 Ala Ile Gln Gly Arg Asn Glu Ser Cys Asp Ile Ser Lys Glu His Thr 55 Ser Glu Thr Thr Glu Arg Thr Pro Lys His Asp Val His Gln Ile Cys 70 75 Asp Lys Asp Ala Gln Gln Asp Leu Asn Leu Asp Ile Glu Lys Ile Thr 85 90

Glu Thr Gly Ala Val Lys Pro Thr Gly Glu Cys Ser Gly Glu Gln Ser Pro Asp Thr Asn Tyr Glu Pro Pro Gly Glu Asp Lys Thr Gln Gly Ser Ser Glu Cys Ile Ser Glu Leu Ser Phe Ser Gly Pro Asn Ala Leu Val Pro Met Asp Phe Leu Gly Asn Gln Glu Asn Ile Gln Asn Leu Gln Leu Arg Val Lys Glu Thr Ser Asn Glu Asn Leu Arg Leu Leu His Val Ile Glu Asp Arg Asp Arg Lys Val Glu Ser Leu Leu Asn Glu Met Lys Glu Leu Asp Ser Lys Leu His Leu Gln Glu Val Gln Leu Met Thr Lys Ile Glu Ala Cys Ile Glu Leu Glu Lys Ile Val Gly Glu Leu Lys Lys Glu Asn Ser Asp Leu Ser Glu Lys Leu Glu Tyr Phe Ser Cys Asp His Gln Glu Leu Leu Gln Arg Val Glu Thr Ser Glu Gly Leu Asn Ser Asp Leu Glu Met His Ala Asp Lys Ser Ser Arg Glu Asp Ile Gly Arg

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<210> 4590
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4590
Ser Ser Val Pro Pro Lys Lys Lys Leu Ala Glu Lys Asp Xaa Lys Lys
1 5 10 15
Leu Phe Gly Val Cys Ser Cys Ala Val His Phe Phe Arg Phe Asn Val
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4160

Leu Cys Arg

<210> 4591

<211> 173

<212> PRT

<213> Homo sapiens

<400> 4591

Ser Pro Ala Arg Pro Leu Ile Arg Ser Asp Lys Met Lys Glu Thr Ile 1 5 10 15

Met Asn Gln Glu Lys Leu Ala Lys Leu Gln Ala Gln Val Arg Ile Gly
20 25 30

Gly Lys Gly Thr Ala Arg Arg Lys Lys Lys Val Val His Arg Thr Ala 35 40 45

Thr Ala Asp Asp Lys Lys Leu Gln Phe Ser Leu Lys Lys Leu Gly Val
50 55 60

Asn Asn Ile Ser Gly Ile Glu Glu Val Asn Met Phe Thr Asn Gln Gly 65 70 75 80

Thr Val Ile His Phe Asn Asn Pro Lys Val Gln Ala Ser Leu Ala Ala 85 90 95

Asn Thr Phe Thr Ile Thr Gly His Ala Glu Thr Lys Gln Leu Thr Glu
100 105 110

Met Leu Pro Ser Ile Leu Asn Gln Leu Gly Ala Asp Ser Leu Thr Ser 115 120 125

Leu Arg Arg Leu Ala Glu Ala Leu Pro Lys Gln Ser Val Asp Gly Lys
130 135 140

Val Glu Asn Phe Asp Glu Ala Ser Lys Asn Glu Ala Asn 165 170

<210> 4592

<211> 66

<212> PRT

<213> Homo sapiens

4161

<400> 4592 Leu Cys Cys Pro Phe His Ile Lys Glu Leu Leu Thr Thr Lys Ala Ala 10 Pro Ala Phe Pro Ile Cys Leu Ser Ile Trp Leu Ala Gly Lys Glu Arg 25 Thr Cys Met Leu Val Lys Glu Glu Val Gly Trp Lys Lys Trp Gly Gly 35 45 Thr Thr Val Lys Ser Arg Val Lys Pro Ser Trp Pro Lys Val Ser Cys 55 Arg Leu 65 <210> 4593 <211> 319 <212> PRT <213> Homo sapiens <400> 4593 Glu Thr Met Ala Lys Asn Pro Pro Glu Asn Cys Glu Asp Cys His Ile 10 Leu Asn Ala Glu Ala Phe Lys Ser Lys Lys Ile Cys Lys Ser Leu Lys 20 25 Ile Cys Gly Leu Val Phe Gly Ile Leu Ala Leu Thr Leu Ile Val Leu 40 Phe Trp Gly Ser Lys His Phe Trp Pro Glu Val Pro Lys Lys Ala Tyr 50 55 Asp Met Glu His Thr Phe Tyr Ser Asn Gly Glu Lys Lys Lys Ile Tyr 70 Met Glu Ile Asp Pro Val Thr Arg Thr Glu Ile Phe Arg Ser Gly Asn 85 90 Gly Thr Asp Glu Thr Leu Glu Val His Asp Phe Lys Asn Gly Tyr Thr Gly Ile Tyr Phe Val Gly Leu Gln Lys Cys Phe Ile Lys Thr Gln Ile

120

135

Lys Val Ile Pro Glu Phe Ser Glu Pro Glu Glu Glu Ile Asp Glu Asn

125

140

115

4162

Glu Glu Ile Thr Thr Phe Phe Glu Gln Ser Val Ile Trp Val Pro 145 150 155 160 Ala Glu Lys Pro Ile Glu Asn Arg Asp Phe Leu Lys Asn Ser Lys Ile 165 170 Leu Glu Ile Cys Asp Asn Val Thr Met Tyr Trp Ile Asn Pro Thr Leu 185 Ile Ser Val Ser Glu Leu Gln Asp Phe Glu Glu Glu Gly Glu Asp Leu 195 200 205 His Phe Pro Ala Asn Glu Lys Lys Gly Ile Glu Gln Asn Glu Gln Trp 215 210 Val Val Pro Gln Val Lys Val Glu Lys Thr Arg His Ala Arg Gln Ala 235 Ser Glu Glu Leu Pro Ile Asn Asp Tyr Thr Glu Asn Gly Ile Glu 245 250 Phe Asp Pro Met Leu Asp Glu Arg Gly Tyr Cys Cys Ile Tyr Cys Arg 260 265 270 Arg Gly Asn Arg Tyr Cys Arg Arg Val Cys Glu Pro Leu Leu Gly Tyr 275 280 285 Tyr Pro Tyr Pro Tyr Cys Tyr Gln Gly Gly Arg Val Ile Cys Arg Val 295 Ile Met Pro Cys Asn Trp Trp Val Ala Arg Met Leu Gly Arg Val 310 315 <210> 4594 <211> 86 <212> PRT <213> Homo sapiens <400> 4594 Tyr Cys Phe Ala Phe Ser Ile Glu Thr Glu Asn Phe Ala Ser Gln Ser 10

Leu Leu Phe Pro Trp Tyr Cys Lys Lys Lys Lys Glu Lys Glu Lys

Lys Lys Glu Asn Gln Pro Ile Ile Ala Cys Thr Glu Leu Lys Ile Val

40

25

20

4163

Ile Asn Arg Ala Cys Trp Glu Lys Lys Glu Asn Asn Cys Cys Leu Phe 50 55 60

Phe Leu Tyr Lys Arg Glu Phe Met Thr Lys Phe Ser Cys Glu Glu Cys 65 70 75 80

Asp Thr Cys Leu Tyr Phe 85

<210> 4595

<211> 147

<212> PRT

<213> Homo sapiens

<400> 4595

Phe Pro Leu Val Leu Val Ser His Gln Arg Thr Val Met Tyr Ala Ser 1 5 10 15

Phe Val Thr Glu Lys Phe Leu Cys Phe Gln Ser Thr Met Arg Cys Met 20 25 30

Ile Leu Phe Ser Ser His Phe Pro Gln Ala Pro Val Asn Gln Gly Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Cys Ala Thr Asp Arg Leu Gly Glu Gly Leu Val Val Ala Gln Leu Glu 50 55 60

Ile Val Ser Lys Ser Lys Pro Pro Ala His Pro Glu Glu Ser Leu Leu 65 70 75 80

Trp Asn Val Lys Cys Asn His Phe Phe Arg Tyr Lys Thr Phe Pro Asn 85 90 95

Asn Val Ile Gly Phe Leu Tyr Gly Lys Ile Glu Arg Ser Cys His Pro 100 105 110

Pro Ala Tyr Ala Phe Ile Ser Phe Val Asp Leu Ser Asp His Leu Leu 115 120 125

Phe Ala Gln Ser Leu Leu Asn Ser Lys Thr Val Pro Met Asn Gly Thr 130 135 140

Pro Val Met

145

<210> 4596

<211> 59

4164

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4596 Thr Pro Xaa Gln Phe Gly Gly Tyr Ala Lys Glu Ala Asp Tyr Val Ala Gln Ala Thr Arg Leu Arg Ala Ala Leu Glu Gly Thr Ala Thr Tyr Arg Gly Asp Ile Tyr Phe Cys Thr Gly Tyr Asp Pro Pro Met Lys Pro Tyr 45 35 40 Gly Arg Arg Asn Glu Ile Trp Leu Leu Lys Thr 55 50 <210> 4597 <211> 358 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (352) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4597 Phe Ala Val Ile Arg Phe Glu Ser Ile Ile His Glu Phe Asp Pro Trp 5 10 15 Phe Asn Tyr Arg Ser Thr His His Leu Ala Ser His Gly Phe Tyr Glu Phe Leu Asn Trp Phe Asp Glu Arg Ala Trp Tyr Pro Leu Gly Arg Ile 40 Val Gly Gly Thr Val Tyr Pro Gly Leu Met Ile Thr Ala Gly Leu Ile 50 55 His Trp Ile Leu Asn Thr Leu Asn Ile Thr Val His Ile Arg Asp Val 65 Cys Val Phe Leu Ala Pro Thr Phe Ser Gly Leu Thr Ser Ile Ser Thr 90 95 85

Phe Leu Leu Thr Arg Glu Leu Trp Asn Gln Gly Ala Gly Leu Leu Ala Ala Cys Phe Ile Ala Ile Val Pro Gly Tyr Ile Ser Arg Ser Val Ala Gly Ser Phe Asp Asn Glu Gly Ile Ala Ile Phe Ala Leu Gln Phe Thr Tyr Tyr Leu Trp Val Lys Ser Val Lys Thr Gly Ser Val Phe Trp Thr Met Cys Cys Leu Ser Tyr Phe Tyr Met Val Ser Ala Trp Gly Gly Tyr Val Phe Ile Ile Asn Leu Ile Pro Leu His Val Phe Val Leu Leu Leu Met Gln Arg Tyr Ser Lys Arg Val Tyr Ile Ala Tyr Ser Thr Phe Tyr Ile Val Gly Leu Ile Leu Ser Met Gln Ile Pro Phe Val Gly Phe Gln Pro Ile Arg Thr Ser Glu His Met Ala Ala Gly Val Phe Ala Leu Leu Gln Ala Tyr Ala Phe Leu Gln Tyr Leu Arg Asp Arg Leu Thr Lys Gln Glu Phe Gln Thr Leu Phe Phe Leu Gly Val Ser Leu Ala Ala Gly Ala Val Phe Leu Ser Val Ile Tyr Leu Thr Tyr Thr Gly Tyr Ile Ala Pro Trp Ser Gly Arg Phe Tyr Ser Leu Trp Asp Thr Gly Tyr Ala Lys Ile His Ile Pro Ile Ile Ala Ser Val Ser Glu His Gln Pro Thr Thr Trp Val Ser Phe Phe Phe Asp Leu His Ile Leu Val Cys Thr Phe Pro Ala Gly Leu Trp Phe Cys Ile Lys Asn Ile Asn Asp Glu Arg Xaa Phe Gly Lys Arg Gly Phe

4166

<210> 4598 <211> 161 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (4) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (87) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4598 Ile Ser Glu Xaa Ser Phe Phe Gln Asn Met Leu Asn Leu Tyr Asn Phe 10 Ser Ala Lys Val Met Ala Asp Gln Leu Arg Lys Pro Pro Ser Arg Asp 20 25 Gln Trp Ser Met Thr Pro Gln Thr Val Asn Ala Tyr Tyr Leu Pro Thr 35 40 Lys Asn Glu Ile Val Phe Pro Ala Gly Ile Leu Gln Ala Pro Phe Tyr 55 Ala Arg Asn His Pro Lys Ala Leu Asn Phe Gly Gly Ile Gly Val Val 70 75 Met Gly His Glu Leu Thr Xaa Ala Phe Asp Asp Gln Gly Arg Glu Tyr 85 90 Asp Lys Glu Gly Asn Leu Arg Pro Trp Gln Asn Glu Ser Leu Ala 100 105 110 Ala Phe Arg Asn His Thr Ala Cys Met Glu Glu Gln Tyr Asn Gln Tyr 120 Gln Val Asn Gly Glu Arg Leu Asn Gly Arg Gln Thr Leu Gly Glu Asn 130 135 Ile Ala Asp Asn Gly Gly Leu Lys Leu Pro Thr Met Leu Thr Lys His 150 155 160 145 Gly

4167

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<210> 4599
<211> 59
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4599
Ala Gln Val Val Leu Val Met Ser Leu Thr Thr Leu Trp Thr Leu
                5 ,
Asp Lys Leu Leu Cys Val Cys Xaa Leu Ile Cys Lys Met Lys Ile
                               25
            20
Ile Ser Val Ser Tyr Arg Tyr Ser Leu Asn Arg Asp Asn Tyr Thr Tyr
        35
                            40
                                                45
Phe Lys Val Val Lys Tyr Thr Ile Thr Thr Arg
<210> 4600
<211> 44
<212> PRT
<213> Homo sapiens
<400> 4600
Asp Gln Pro Gly Gln His Ser Lys Thr Pro Ser Leu Gln Lys Asn Leu
                5
Lys Ile Ser Gln Val Trp Trp His Ala Pro Val Val Pro Ala Thr Arg
                                                    30
                                25
Asp Ala Glu Val Arg Gly Ser Leu Glu Pro Gly Arg
        35
                            40
<210> 4601
<211> 397
<212> PRT
<213> Homo sapiens
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<220>

<221 <222 <223	> (2 > Xa	71)	_T uals	any	of	the	natu	ırall	у ос	curr	ing	L-am	nino	ació	ls
<221 <222 <223	.> SI :> (3 :> Xa	92)	quals	any	of	the	natu	ırall	y oc	curr	ing	L-an	nino	ació	ls
<220 <221 <222 <223	.> SI :> (3	95)	guals	s any	of	the	natu	ırall	y oc	ccurr	ring	L-an	nino	ació	ls
<220 <221 <222 <223	.> S] !> (3	396)	quals	s any	of,	the	natu	ırall	у ос	ccuri	ing	L-an	nino	acio	ls
<400 Ser 1			Pro	Ala 5	Ala	Gly	Pro	Arg	Ser 10	Ala	Leu	Gln	His	Asn 15	Lys
Met	Ala	Asn	Gln 20	Val	Asn	Gly	Asn	Ala 25	Val	Gln	Leu	Lys	Glu 30	Glu	Glu
Glu	Pro	Met 35	Asp	Thr	Ser	Ser	Val 40	Thr	His	Thr	Glu	His 45	Tyr	Lys	Thr
Leu	Ile 50	Glu	Ala	Gly	Leu	Pro 55	Gln	Lys	Val	Ala	Glu 60	Arg	Leu	Asp	Glu
Ile 65	Phe	Gln	Thr	Gly	Leu 70	Val	Ala	Tyr	Val	Asp 75	Leu	Asp	Glu	Arg	Ala 80
Ile	Asp	Ala	Leu	Arg 85	Glu	Phe	Asn	Glu	Glu 90	Gly	Ala	Leu	Ser	Val 95	Leu
Gln	Gln	Phe	Lys 100	Glu	Ser	Asp	Leu	Ser 105	His	Val	Gln	Asn	Lys 110	Ser	Ala
Phe	Leu	Cys 115	Gly	Val	Met	Lys	Thr 120	Tyr	Arg	Gln	Arg	Glu 125	Lys	Gln	Gly
Ser	Lys 130	Val	Gln	Glu	Ser	Thr 135	Lys	Gly	Pro	Asp	Glu 140	Ala	Lys	Ile	Lys
Ala 145	Leu	Leu	Glu	Arg	Thr 150	Gly	Туг	Thr	Leu	Asp 155	Val	Thr	Thr	Gly	Gln 160
Arg	Lys	Tyr	Gly	Gly	Pro	Pro	Pro	Asp	Ser	Val	Tyr	Ser	Gly	Val	Gln

Pro Gly Ile Gly Thr Glu Val Phe Val Gly Lys Ile Pro Arg Asp Leu Tyr Glu Asp Glu Leu Val Pro Leu Phe Glu Lys Ala Gly Pro Ile Trp Asp Leu Arg Leu Met Met Asp Pro Leu Ser Gly Gln Asn Arg Gly Tyr Ala Phe Ile Thr Phe Cys Gly Lys Glu Ala Ala Gln Glu Ala Val Lys Leu Cys Asp Ser Tyr Glu Ile Arg Pro Gly Lys His Leu Gly Val Cys Ile Ser Val Ala Asn Asn Arg Leu Phe Val Gly Ser Ile Pro Xaa Asn Lys Thr Lys Glu Asn Ile Leu Glu Glu Phe Ser Lys Val Thr Glu Gly Leu Val Asp Val Ile Leu Tyr His Gln Pro Asp Asp Lys Lys Asn Arg Gly Phe Cys Phe Leu Glu Tyr Glu Asp His Lys Ser Ala Ala Gln Ala Arg Arg Leu Met Ser Gly Lys Val Lys Val Trp Gly Asn Val Val Thr Val Glu Trp Ala Asp Pro Val Glu Glu Pro Asp Pro Glu Val Met Ala Lys Val Lys Val Leu Phe Val Arg Asn Leu Ala Thr Thr Val Thr Glu Glu Ile Leu Glu Lys Ser Phe Ser Glu Phe Gly Lys Leu Glu Arg Val Lys Lys Leu Lys Val Xaa Ala Ala Xaa Xaa Asn

<210> 4602

<211> 355

<212> PRT

<213> Homo sapiens

<222 <223	.> SI !> (2 i> Xā	2)	quals	any	of	the	natu	ırall	y oc	curr	ing	L-am	ino	acid	s
<222	.> SI !> (6	56)	u als	any	of	the	natu	ırall	y oc	curr	ing	L-an	ino	acid	ls
<222	.> SI !> (1	131)	guals	any	of,	the	natu	ırall	y oc	curr	ing	L-an	nino	acid	ls
<222	l> si 2> (2	253)	quals	any	of,	the	natu	ırall	Ly oc	curr	ing	L-an	nino	ació	ls
)> 46 Xaa		Leu	Leu	Tyr	Arg	Pro	Leu	Glu	Gln	Gln	His	Gly	Val	Ile
1				5					10					15	
Pro	Asp	Arg	Asp 20	Ala	Glu	Phe	Cys	Leu 25	Phe	Asp	Arg	Val	Val 30	Asn	Val
Arg	Glu	Asn 35	Phe	Ser	Val	Pro	Val 40	Gly	Leu	Arg	Gly	Thr 45	Ile	Ile	Gly
Ile	Lys 50	Gly	Ala	Asn	Arg	Glu 55	Ala	Asp	Val	Leu	Phe 60	Glu	Val	Leu	Phe
Asp 65	Xaa	Glu	Phe	Pro	Gly 70	Gly	Leu	Thr	Ile	Arg 75	Cys	Ser	Pro	Gly	Arg 80
Gly	Tyr	Arg	Leu	Pro 85	Thr	Ser	Ala	Leu	Val 90	Asn	Leu	Ser	His	Gly 95	Ser
Arg	Ser	Glu	Thr 100	Gly	Asn	Gln	Lys	Leu 105	Thr	Ala	Ile	Val	Lys 110	Pro	Gln
Pro	Ala	Val 115	His	Gln	His	Ser	Ser 120	Ser	Ser	Ser	Val	Ser 125	Ser	Gly	His
Leu	Gly 130	Xaa	Leu	Asn	His	Ser 135	Pro	Gln	Ser	Leu	Phe 140	Val	Pro	Thr	Gln
Val 145	Pro	Thr	Lys	Asp	Asp 150	Asp	Glu	Phe	Cys	Asn 155	Ile	Trp	Gln	Ser	Leu 160

4171

Gln Gly Ser Gly Lys Met Gln Tyr Phe Glu Pro Thr Ile Gln Glu Lys 170 165 Gly Ala Val Leu Pro Gln Glu Ile Ser Gln Val Asn Gln His His Lys 180 185 Ser Gly Phe Asn Asp Asn Ser Val Lys Tyr Gln Gln Arg Lys His Asp 195 200 Pro His Arg Lys Phe Lys Glu Glu Cys Lys Ser Pro Lys Ala Glu Cys 220 215 Trp Ser Gln Lys Met Ser Asn Lys Gln Pro Asn Ser Gly Ile Glu Asn 230 235 Phe Leu Ala Ser Leu Asn Ile Ser Lys Glu Asn Glu Xaa Gln Ser Ser 245 His His Gly Glu Pro Pro Ser Glu Glu His Leu Ser Pro Gln Ser Phe 260 265 Ala Met Lys Gly Thr Arg Met Leu Lys Glu Ile Leu Lys Ile Asp Gly 280 Ser Asn Thr Val Asp His Lys Asn Glu Ile Lys Gln Ile Ala Asn Glu 295 Ile Pro Val Ser Ser Asn Arg Arg Asp Glu Tyr Gly Leu Pro Ser Gln 305 310 Pro Lys Gln Asn Lys Lys Leu Ala Ser Tyr Met Asn Lys Pro His Ser 330 325 Ala Asn Glu Tyr His Asn Val Gln Ser Met Asp Asn Met Cys Trp Pro 345 Ala Pro Ser 355 <210> 4603 <211> 385 <212> PRT <213> Homo sapiens <220> <221> SITE

<223> Xaa equals any of the naturally occurring L-amino acids

<222> (42)

<400)> 46	503													
His 1	Arg	Arg	Tyr	Ser 5	Val	Ala	Ser	Gln	Val 10	Pro	Ser	Gly	Cys	Thr 15	Leu
Glu	Asp	His	Thr 20	Arg	Phe	Leu	Phe	Gly 25	Cys	Gln	Arg	Pro	Pro 30	His	Pro
Pro	Leu	Ser 35	Trp	Glu	Lys	Asp	Gly 40	Gly	Xaa	Val	Arg	Gln 45	Asp	Leu	Ala
Gln	Leu 50	Met	Asn	Ser	Ser	Gly 55	Ser	His	Lys	Asp	Leu 60	Ala	Gly	Lys	Tyr
Arg 65	Gln	Ile	Leu	Glu	Lys 70	Ala	Ile	Gln	Leu	Ser 75	Gly	Ala	Glu	Gln	Leu 80
Glu	Ala	Leu	Lys	Ala 85	Phe	Val	Glu	Ala	Met 90	Val	Asn	Glu	Asn	Val 95	Ser
Leu	Val	Ile	Ser 100	Arg	Gln	Leu	Leu	Thr 105	Asp	Phe	Cys	Thr	His 110	Leu	Pro
Asn	Leu	Pro 115	Asp	Ser	Thr	Ala	Lys 120	Glu	Ile	Tyr	His	Phe 125	Thr	Leu	Glu
Lys	Ile 130	Gln	Pro	Arg	Val	Ile 135	Ser	Phe	Glu	Glu	Gln 140	Val	Ala	Ser	Ile
Arg 145	Gln	His	Leu	Ala	Ser 150	Ile	Tyr	Glu	Lys	Glu 155	Glu	Asp	Trp	Arg	Asn 160
Ala	Ala	Gln	.Val	Leu 165	Val	Gly	Ile	Pro	Leu 170	Glu	Thr	Gly	Gln	Lys 175	Gln
Tyr	Asn	Val	Asp 180	Tyr	Lys	Leu	Glu	Thr 185	Tyr	Leu	Lys	Ile	Ala 190	Arg	Leu
Tyr	Leu	Glu 195	Asp	Asp	Asp	Pro	Val 200	Gln	Ala	Glu	Ala	Туг 205	Ile	Asn	Arg
Ala	Ser 210	Leu	Leu	Gln	Asn	Glu 215	Ser	Thr	Asn	Glu	Gln 220	Leu	Gln	Ile	His
Tyr 225	Lys	Val	Cys	Tyr	Ala 230	Arg	Val	Leu	Asp	Tyr 235	Arg	Arg	Lys	Phe	Ile 240
Glu	Ala	Ala	Gln	Arg 245	Tyr	Asn	Glu	Leu	Ser 250	Tyr	Lys	Thr	Ile	Val 255	His
Glu	Ser	Glu	Arg 260	Leu	Glu	Ala	Leu	Lys 265	His	Ala	Leu	His	Cys 270	Thr	Ile

4173

Leu Ala Ser Ala Gly Gln Gln Arg Ser Arg Met Leu Ala Thr Leu Phe 275 280 285 Lys Asp Glu Arg Cys Gln Gln Leu Ala Ala Tyr Gly Ile Leu Glu Lys 295 Met Tyr Leu Asp Arg Ile Ile Arg Gly Asn Gln Leu Gln Glu Phe Ala Ala Met Leu Met Pro His Gln Lys Ala Thr Thr Ala Asp Gly Ser Ser 330 325 Ile Leu Asp Arg Ala Val Ile Glu His Asn Leu Leu Ser Ala Ser Lys 345 340 Leu Tyr Asn Asn Ile Thr Phe Glu Glu Leu Gly Ala Leu Leu Glu Ile 360 Pro Ala Ala Lys Ala Glu Lys Ile Ala Ser Gln Met Ile Thr Glu Asp 375 380 Va1 385 <210> 4604 <211> 120 <212> PRT <213> Homo sapiens <400> 4604 Ala His Gly Gln Ile Glu Gly Lys Ala Leu Thr His Asp His Thr Ala 10 Glu Lys Trp Gln Arg Gln Asp Leu Asn Leu Glu Pro Leu Ala Pro His 25 30 20 Thr Ser Asn Leu Asn His Ser Pro Tyr Asn Thr Thr Tyr Val Val Lys Met Cys Gly Gly His Ala Ile Asn Val Gly Pro Phe Thr Val Ala Gly 55 Arg Gly Arg Asn Leu Gln Phe Leu Arg Val Leu Leu Arg Cys Pro 70 75 Pro Val Leu Gly His Ser Cys Ser Leu Pro Cys Pro Ala Trp Ser His

90

4174

Pro Pro Ser Ala Asn Arg Ser Leu Gly Arg Val Leu Trp Ala Leu Ile 100 105 110

Arg Pro Trp Gln Gly Arg Ser Ser 115 120

<210> 4605

<211> 390

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4605

Thr Ser Val Ala Ala Ala Ala Ala Arg Gly Arg Ala Gly Cys Pro Leu

1 5 10 15

Thr Ala Ala Ser Ala Ala Arg Phe Lys Met Ala Ala Cys Ser His Ser 20 25 30

Phe Ser Ala Glu Arg Leu Leu Thr Phe Ile Val Phe Ser Ala Arg Phe 35 40 45

Asp Arg Leu Xaa Pro Ala Ala Leu Ser Gly Ile Phe Tyr Gln Ala Glu 50 55 60

Met His Arg Thr Thr Arg Ile Lys Ile Thr Glu Leu Asn Pro His Leu 65 70 75 80

Met Cys Val Leu Cys Gly Gly Tyr Phe Ile Asp Ala Thr Thr Ile Ile 85 90 95

Glu Cys Leu His Ser Phe Cys Lys Thr Cys Ile Val Arg Tyr Leu Glu 100 105 110

Thr Ser Lys Tyr Cys Pro Ile Cys Asp Val Gln Val His Lys Thr Arg 115 120 125

Pro Leu Leu Asn Ile Arg Ser Asp Lys Thr Leu Gln Asp Ile Val Tyr 130 135 140

Lys Leu Val Pro Gly Leu Phe Lys Asn Glu Met Lys Arg Arg Asp 145 150 155 160

Phe Tyr Ala Ala His Pro Ser Ala Asp Ala Ala Asn Gly Ser Asn Glu 165 170 175

4175

Asp Arg Gly Glu Val Ala Asp Glu Asp Lys Arg Ile Ile Thr Asp Asp 180 185 Glu Ile Ile Ser Leu Ser Ile Glu Phe Phe Asp Gln Asn Arg Leu Asp 200 Arg Lys Val Asn Lys Asp Lys Glu Lys Ser Lys Glu Glu Val Asn Asp 215 220 Lys Arg Tyr Leu Arg Cys Pro Ala Ala Met Thr Val Met His Leu Arg 230 235 Lys Phe Leu Arg Ser Lys Met Asp Ile Pro Asn Thr Phe Gln Ile Asp 245 250 Val Met Tyr Glu Glu Glu Pro Leu Lys Asp Tyr Tyr Thr Leu Met Asp 265 Ile Ala Tyr Ile Tyr Thr Trp Arg Arg Asn Gly Pro Leu Pro Leu Lys 280 Tyr Arg Val Arg Pro Thr Cys Lys Arg Met Lys Ile Ser His Gln Arg 290 295 Asp Gly Leu Thr Asn Ala Gly Glu Leu Glu Ser Asp Ser Gly Ser Asp 305 Lys Ala Asn Ser Pro Ala Gly Gly Ile Pro Ser Thr Ser Ser Cys Leu 330 Pro Ser Pro Ser Thr Pro Val Gln Ser Pro His Pro Gln Phe Pro His 340 345 Ile Ser Ser Thr Met Asn Gly Thr Ser Asn Ser Pro Ser Gly Asn His 355 360 Gln Ser Ser Phe Ala Asn Arg Pro Arg Lys Ser Ser Val Asn Gly Ser 370 375 380 Ser Ala Thr Ser Ser Gly 385 390

<210> 4606

<211> 197

<212> PRT

<213> Homo sapiens

<400> 4606

4176

Leu Thr Gly Leu Ser Ile Ser Ser Thr Pro Pro Ala Val Ser Ser Val
1 5 10 15

Leu Ser Thr Gly Val Pro Thr Val Pro Leu Leu Pro Pro Gln Val Asn 20 25 30

Gln Ser Leu Thr Ser Val Pro Pro Met Asn Pro Ala Thr Thr Leu Pro
35 40 45

Gly Leu Met Pro Leu Pro Ala Gly Leu Pro Asn Leu Pro Asn Leu Asn 50 60

Leu Asn Leu Pro Ala Pro His Ile Met Pro Gly Val Gly Leu Pro Glu 65 70 75 80

Leu Val Asn Pro Gly Leu Pro Pro Leu Pro Ser Met Pro Pro Arg Asn 85 90 95

Leu Pro Gly Ile Ala Pro Leu Pro Leu Pro Ser Glu Phe Leu Pro Ser 100 105 110

Phe Pro Leu Val Pro Glu Ser Ser Ser Ala Ala Ser Ser Gly Glu Leu 115 120 125

Leu Ser Ser Leu Pro Pro Thr Ser Asn Ala Pro Ser Asp Pro Ala Thr 130 135 140

Thr Thr Ala Lys Ala Asp Ala Ala Ser Ser Leu Thr Val Asp Val Thr 145 150 155 160

Pro Pro Thr Ala Lys Ala Pro Thr Thr Val Glu Asp Arg Val Gly Asp 165 170 175

Ser Thr Pro Val Ser Glu Lys Pro Val Ser Ala Ala Val Asp Ala Asn 180 185 190

Ala Ser Glu Ser Pro 195

<210> 4607

<211> 96

<212> PRT

<213> Homo sapiens

<400> 4607

Leu Met Phe Tyr Val Leu Phe Trp Thr Leu Ser Ser Cys Lys Asn Phe 1 5 10 15

Tyr Lys Asn Cys Phe Leu His Pro Cys Gly Ala Tyr Ser Ser Glu Pro

4177

20 25 30

Ser Pro Gln Ser Gln Cys Leu Cys Phe Leu Phe Tyr Phe Cys Ser Ile 35 40 45

Arg Phe Leu Leu Leu Cys Leu Lys Ser Ser Leu Gly Ser Tyr Gln 50 55 60

Gly Phe Ser Phe Cys Val Ala Phe Ala Ala Trp Ile Lys His Trp Leu 65 70 75 80

Thr Val Leu Met Cys Glu Glu Lys Lys Phe Ser Lys Ala Gly Glu Leu 85 90 95

<210> 4608

<211> 298

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (79)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (89)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4608

Pro Cys Ala Trp Arg Ala Ala Arg Gly Gly Pro Cys Ala Ala Pro Leu 1 5 10 15

Gly Leu Arg Glu Arg Gly Arg Val Ser Xaa Arg Leu Leu Gly Pro Ala 20 25 30

Ala Ala Arg Ala Leu Leu Cly Leu Pro Gly Arg Thr Leu Glu Ala 35 40 45

Ala Ser Gly Arg Ser Trp Leu Ala Ala Ala Arg Asp Arg Pro Ala Glu 50 55 60

4178

Pro Leu Phe Gly Arg Gly Glu Gly Ser Gln Ala Ser Gly Xaa Ala 65 70 75 Gly Ala Ala Ala Glu Ala Pro Gly Xaa Gln Trp Gly Pro Ala Ser Thr 85 90 Pro Ser Leu Tyr Glu Asn Pro Trp Thr Ile Pro Asn Met Leu Ser Met 105 Thr Arg Ile Gly Leu Ala Pro Val Leu Gly Tyr Leu Ile Ile Glu Glu 120 Asp Phe Asn Ile Ala Leu Gly Val Phe Ala Leu Ala Gly Leu Thr Asp 135 130 Leu Leu Asp Gly Phe Ile Ala Arg Asn Trp Ala Asn Gln Arg Ser Ala 145 155 Leu Gly Ser Ala Leu Asp Pro Leu Ala Asp Lys Ile Leu Ile Ser Ile 170 Leu Tyr Val Ser Leu Thr Tyr Ala Asp Leu Ile Pro Val Pro Leu Thr 180 185 190 Tyr Met Ile Ile Ser Arg Asp Val Met Leu Ile Ala Ala Val Phe Tyr 200 195 Val Arg Tyr Arg Thr Leu Pro Thr Pro Arg Thr Leu Ala Lys Tyr Phe Asn Pro Cys Tyr Ala Thr Ala Arg Leu Lys Pro Thr Phe Ile Ser Lys 235 230 Val Asn Thr Ala Val Gln Leu Ile Leu Val Ala Ala Ser Leu Ala Ala 245 250 Pro Val Phe Asn Tyr Ala Asp Ser Ile Tyr Leu Gln Ile Leu Trp Cys 260 265 Phe Thr Ala Phe Thr Thr Ala Ala Ser Ala Tyr Ser Tyr Tyr His Tyr 280 285 Gly Arg Lys Thr Val Gln Val Ile Lys Asp 290 295

<210> 4609

<211> 279

<212> PRT

PCT/US00/26524 WO 01/22920

4179

<213	<213> Homo sapiens														
<400)> 46	509													
Glu 1	Gly	Pro	Ala	Glu 5	Gly	Asn	Met	Ala	Ala 10	Lys	Val	Phe	Glu	Ser 15	Ile
Gly	Lys	Phe	Gly 20	Leu	Ala	Leu	Ala	Val 25	Ala	Gly	Gly	Val	Val 30	Asn	Ser
Ala	Leu	Tyr 35	Asn	Val	Asp	Ala	Gly 40	His	Arg	Ala	Val	Ile 45	Phe	Asp	Arg
Phe	Arg 50	Gly	Val	Gln	Asp	Ile 55	Val	Val	Gly	Glu	Gly 60	Thr	His	Phe	Leu
Ile 65	Pro	Trp	Val	Gln	Lys 70	Pro	Ile	Ile	Phe	Asp 75	Cys	Arg	Ser	Arg	Pro 80
Arg	Asn	Val	Pro	Val 85	Ile	Thr	Gly	Ser	Lys 90	Asp	Leu	Gln	Asn	Val 95	Asn
Ile	Thr	Leu	Arg 100	Ile	Leu	Phe	Arg	Pro 105	Val	Ala	Ser	Gln	Leu 110	Pro	Arg
Ile	Phe	Thr 115	Ser	Ile	Gly	Glu	Asp 120	Tyr	Asp	Glu	Arg	Val 125	Leu	Pro	Ser
Ile	Thr 130	Thr	Glu	Ile	Leu	Lys 135	Ser	Val	Val	Ala	Arg 140	Phe	Asp	Ala	Gly
Glu 145	Leu	Ile	Thr	Gln	Arg 150	Glu	Leu	Val	Ser	Arg 155	Gln	Val	Ser	Asp	Asp 160
Leu	Thr	Glu	Arg	Ala 165	Ala	Thr	Phe	Gly	Leu 170	Ile	Leu	Asp	Asp	Val 175	Ser
Leu	Thr	His	Leu 180	Thr	Phe	Gly	Lys	Glu 185		Thr	Glu	Ala	Val 190	Glu	Ala
Lys	Gln	Val 195	Ala	Gln	Gln	Glu	Ala 200	Glu	Arg	Ala	Arg	Phe 205	Val	Val	Glu
Lys	Ala 210	Glu	Gln	Gln	Lys	Lys 215	Ala	Ala	Ile	Ile	Ser 220	Ala	Glu	Gly	Asp
Ser 225	Lys	Ala	Ala	Glu	Leu 230	Ile	Ala	Asn	Ser	Leu 235	Ala	Thr	Ala	Gly	Asp 240

Gly Leu Ile Glu Leu Arg Lys Leu Glu Ala Ala Glu Asp Ile Ala Tyr

245

4180

Gln Leu Ser Arg Ser Arg Asn Ile Thr Tyr Leu Pro Ala Gly Gln Ser 260 265 270

Val Leu Leu Gln Leu Pro Gln 275

<210> 4610

<211> 406

<212> PRT

<213> Homo sapiens

<400> 4610

Val Thr Ala Cys Ala Ala Pro Ala Ala Trp Leu Pro Ile Leu Val Ala 1 5 10 15

Asp Ile Trp Ser Ser Tyr Asn Met Ala Asp Ile Asp Asn Lys Glu Gln 20 25 30

Ser Glu Leu Asp Gln Asp Leu Asp Asp Val Glu Glu Val Glu Glu Glu Glu 35 40 45

Glu Thr Gly Glu Glu Thr Lys Leu Lys Ala Arg Gln Leu Thr Val Gln
50 55 60

Met Met Gln Asn Pro Gln Ile Leu Ala Ala Leu Gln Glu Arg Leu Asp 65 70 75 80

Gly Leu Val Glu Thr Pro Thr Gly Tyr Ile Glu Ser Leu Pro Arg Val 85 90 95

Val Lys Arg Arg Val Asn Ala Leu Lys Asn Leu Gln Val Lys Cys Ala 100 105 110

Gln Ile Glu Ala Lys Phe Tyr Glu Glu Val His Asp Leu Glu Arg Lys 115 120 125

Tyr Ala Val Leu Tyr Gln Pro Leu Phe Asp Lys Arg Phe Glu Ile Ile 130 135 140

Asn Ala Ile Tyr Glu Pro Thr Glu Glu Glu Cys Glu Trp Lys Pro Asp 145 150 155 160

Glu Glu Asp Glu Ile Ser Glu Glu Leu Lys Glu Lys Ala Lys Ile Glu 165 170 175

Asp Glu Lys Lys Asp Glu Glu Lys Glu Asp Pro Lys Gly Ile Pro Glu 180 185 190

Phe Trp Leu Thr Val Phe Lys Asn Val Asp Leu Leu Ser Asp Met Val

4181

. 200 205 195 Gln Glu His Asp Glu Pro Ile Leu Lys His Leu Lys Asp Ile Lys Val 215 220 Lys Phe Ser Asp Ala Gly Gln Pro Met Ser Phe Val Leu Glu Phe His 230 235 Phe Glu Pro Asn Glu Tyr Phe Thr Asn Glu Val Leu Thr Lys Thr Tyr 250 245 Arg Met Arg Ser Glu Pro Asp Asp Ser Asp Pro Phe Ser Phe Asp Gly 265 Pro Glu Ile Met Gly Cys Thr Gly Cys Gln Ile Asp Trp Lys Lys Gly 280 285 Lys Asn Val Thr Leu Lys Thr Ile Lys Lys Gln Lys His Lys Gly 290 295 Arg Gly Thr Val Arg Thr Val Thr Lys Thr Val Ser Asn Asp Ser Phe 305 310 315 Phe Asn Phe Phe Ala Pro Pro Glu Val Pro Glu Ser Gly Asp Leu Asp 325 330 Asp Asp Ala Glu Ala Ile Leu Ala Ala Asp Phe Glu Ile Gly His Phe 345 Leu Arg Glu Arg Ile Ile Pro Arg Ser Val Leu Tyr Phe Thr Gly Glu 355 Ala Ile Glu Asp Asp Asp Asp Tyr Asp Glu Glu Glu Glu Ala 370 375 Asp Glu Gly Tyr Gln Leu Phe Glu Glu Val Lys Ser Cys Ser Lys Leu 395 Phe Gln Arg Trp Leu Gln 405 <210> 4611 <211> 126 <212> PRT

<400> 4611
Gly Val Val Lys Ser Leu Leu Phe Thr Arg Cys Asn Val Leu Val Pro
1 5 10 15

<213> Homo sapiens

4182

Tyr Lys Gln Gly Trp Gly Glu Glu Gly Arg Ala Lys Thr Asn Ile Glu 20 25 30

Ile Leu Lys Gln Gln Gln Ser Glu Trp Ile Leu Phe Phe Val Ile Val 35 40 45

Gly Gly Leu Lys Asn Ser Pro His Val Ile Ile Val Asn Thr Leu Leu 50 55 60

Cys Gly His Cys Asn Ile Trp Gly Val Gly Gln Gly Gly Lys Val Thr 65 70 75 80

Ile Val His Met Ser Leu Ala Ser Val Gln Ser Ser Val Gln Asn Val 85 90 95

Met Leu Phe Cys Lys Lys Arg Phe Met Ile Phe Lys Ile Asn Leu Val 100 105 110

Asn Leu Phe Leu Val Val Ile Phe Phe Leu Arg Gln Ser Phe 115 120 125

<210> 4612

<211> 94

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4612

Gln Glu Leu Arg Ser Pro Ser Arg Ser Pro Ser Pro Pro Pro Lys Ser 1 5 10 15

Pro Pro Trp Thr Thr Gly Gly Ser Leu Cys Glu Gln Leu Ala Phe Arg
20 25 30

Lys Pro Leu Ser Val Phe Lys Gln Lys Val Glu Gly Ala Thr Lys Gln 35 40 45

Ala Ala Val Arg Ala Ser Xaa Cys Arg Pro Leu Pro Cys Ser Ser Ser 50 55 60

Ser Phe Ala Ser Ala Ser Ser Val Met Phe Cys Leu Glu Phe Tyr Leu 65 70 75 80

Asp Phe Phe Ser Gly Tyr Phe Ser Val Phe Gln Pro Leu Leu

4183

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<210> 4613
<211> 69
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4613
Lys Lys Ser Leu Arg Cys Glu Tyr Arg Ile Asp Ile Glu Arg Leu Tyr
                                     10
                  5
Met Ser Lys Thr His Leu Ser Ser Ser His Arg Pro Leu Gln Ser Gly
His Val Gly Gln Xaa Gly Thr Gly Ala Gly Asp Ala Pro Pro Gly Gln
                            40
Asn Ala Pro Phe Val Ala Leu Pro Asp Thr Xaa Tyr Leu Leu Xaa Lys
     50
                         55
                                             60
Arg Glu Thr Gly Ser
 65
<210> 4614
<211> 165
<212> PRT
<213> Homo sapiens
<400> 4614
Asp Pro Arg Thr Met Asn Leu Ala Ile Ser Ile Ala Leu Leu Leu Thr
                5
                                    10
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4184

Val Leu Gln Val Ser Arg Gly Gln Lys Val Thr Ser Leu Thr Ala Cys 25 Leu Val Asp Gln Ser Leu Arg Leu Asp Cys Arg His Glu Asn Thr Ser 40 Ser Ser Pro Ile Gln Tyr Glu Phe Ser Leu Thr Arg Glu Thr Lys Lys 50 55 His Val Leu Phe Gly Thr Val Gly Val Pro Glu His Thr Tyr Arg Ser Arg Thr Asn Phe Thr Ser Lys Tyr Asn Met Lys Val Leu Tyr Leu Ser 85 90 Ala Phe Thr Ser Lys Asp Glu Gly Thr Tyr Thr Cys Ala Leu His His 100 105 110 Ser Gly His Ser Pro Pro Ile Ser Ser Gln Asn Val Thr Val Leu Arg 115 120 Asp Lys Leu Val Lys Cys Glu Gly Ile Ser Leu Leu Ala Gln Asn Thr 135 Ser Trp Leu Leu Leu Leu Leu Ser Leu Ser Leu Gln Ala Thr 150 155 Asp Phe Met Ser Leu 165 <210> 4615 <211> 85 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (76) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4615 Ser Leu Cys Phe Ile Asp Gly Lys Tyr His Lys Gln Ile Lys Ile Glu 5 10 15 Glu Asn Ala Thr Gly Phe Ser Tyr Glu Ser Leu Phe Arg Glu Tyr Leu

Asn Glu Thr Val Thr Glu Val Trp Ile Glu Asp Pro Tyr Ile Arg His

45

40

4185

Thr His Gln Gly Ile Asp Gln Val Gln Gln Ser Arg Gly Leu Gln Glu 50 60

Ile Glu Glu Ser Leu Arg Ser His Gly Ser Ala Xaa Gly Arg Ser Ile
65 70 75 80

Leu Phe Phe Asn Thr

<210> 4616

<211> 366

<212> PRT

<213> Homo sapiens

<400> 4616

Pro Gly Ser Thr His Ala Ser Gly Lys Ile Gln Asn Lys Trp Leu Arg
1 5 10 15

Pro Ser Pro Arg Ser His Arg Thr Pro Glu Ser Gly Arg Val Leu Ser
20 25 30

Leu Phe Arg Leu Pro Pro Pro Gly Met Ala Leu Ser Gly Ser Thr Pro 35 40 45

Ala Pro Cys Trp Glu Glu Asp Glu Cys Leu Asp Tyr Tyr Gly Met Leu 50 55 60

Ser Leu His Arg Met Phe Glu Val Val Gly Gly Gln Leu Thr Glu Cys
65 70 75 80

Glu Leu Glu Leu Leu Ala Phe Leu Leu Asp Glu Ala Pro Gly Ala Ala 85 90 95

Gly Gly Leu Ala Arg Ala Arg Ser Gly Leu Glu Leu Leu Glu Leu
100 105 110

Glu Arg Arg Gly Gln Cys Asp Glu Ser Asn Leu Arg Leu Leu Gly Gln
115 120 125

Leu Leu Arg Val Leu Ala Arg His Asp Leu Leu Pro His Leu Ala Arg 130 135 140

Lys Arg Arg Arg Pro Val Ser Pro Glu Arg Tyr Ser Tyr Gly Thr Ser 145 150 155 160

Ser Ser Ser Lys Arg Thr Glu Gly Ser Cys Arg Arg Arg Arg Gln Ser 165 170 175

4186

Ser Ser Ser Ala Asn Ser Gln Gln Gly Gln Trp Glu Thr Gly Ser Pro 185 Pro Thr Lys Arg Gln Arg Arg Ser Arg Gly Arg Pro Ser Gly Gly Ala 200 Arg Arg Arg Arg Gly Ala Pro Ala Ala Pro Gln Gln Gln Ser Glu 215 Pro Ala Arg Pro Ser Ser Glu Gly Lys Val Thr Cys Asp Ile Arg Leu 230 235 Arg Val Arg Ala Glu Tyr Cys Glu His Gly Pro Ala Leu Glu Gln Gly 245 250 Val Ala Ser Arg Arg Pro Gln Ala Leu Ala Arg Gln Leu Asp Val Phe 260 Gly Gln Ala Thr Ala Val Leu Arg Ser Arg Asp Leu Gly Ser Val Val 280 285 Cys Asp Ile Lys Phe Ser Glu Leu Ser Tyr Leu Asp Ala Phe Trp Gly 300 295 Asp Tyr Leu Ser Gly Ala Leu Leu Gln Ala Leu Arg Gly Val Phe Leu 310 315 Thr Glu Ala Leu Arg Glu Ala Val Gly Arg Glu Ala Val Arg Leu Leu 325 Val Ser Val Asp Glu Ala Asp Tyr Glu Ala Gly Arg Arg Arg Leu Leu 340 345 Leu Met Glu Glu Gly Gly Arg Arg Pro Thr Glu Ala Ser

<210> 4617

<211> 482

<212> PRT

<213> Homo sapiens

<400> 4617

Arg Glu Gln Lys Leu Glu Leu His Arg Gly Gly Gly Arg Ser Arg Thr
1 5 10 15

360

Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly Thr Ser Met Val Leu Gln 20 25 30

Thr Thr Lys Gly Leu Arg Leu Leu Phe Asp Gly Asp Ala His Leu Leu

4187

35 40 Met Ser Ile Pro Ser Pro Phe Arg Gly Arg Leu Cys Gly Leu Cys Gly 55 Asn Phe Asn Gly Asn Trp Ser Asp Asp Phe Val Leu Pro Asn Gly Ser 70 75 Ala Ala Ser Ser Val Glu Thr Phe Gly Ala Ala Trp Arg Val Pro Gly 85 Ser Ser Lys Gly Cys Gly Glu Gly Cys Gly Pro Gln Gly Cys Pro Val Cys Leu Ala Glu Glu Thr Ala Pro Tyr Glu Ser Asn Glu Ala Cys Gly 120 Gln Leu Arg Asn Pro Gln Gly Pro Phe Ala Thr Cys Gln Ala Val Leu 130 135 Ser Pro Ser Glu Tyr Phe Arg Gln Cys Val Tyr Asp Leu Cys Ala Gln 145 Lys Gly Asp Lys Ala Phe Leu Cys Arg Ser Leu Ala Ala Tyr Thr Ala 170 Ala Cys Gln Ala Ala Gly Val Ala Val Lys Pro Trp Arg Thr Asp Ser 185 Phe Cys Pro Leu His Cys Pro Ala His Ser His Tyr Ser Ile Cys Thr 195 200 205 Arg Thr Cys Gln Gly Ser Cys Ala Ala Leu Ser Gly Leu Thr Gly Cys Thr Thr Arg Cys Phe Glu Gly Cys Glu Cys Asp Asp Arg Phe Leu Leu 230 235 Ser Gln Gly Val Cys Ile Pro Val Gln Asp Cys Gly Cys Thr His Asn 245 250 Gly Arg Tyr Leu Pro Val Asn Ser Ser Leu Leu Thr Ser Asp Cys Ser 260 Glu Arg Cys Ser Cys Ser Ser Ser Gly Leu Thr Cys Gln Ala Ala 285 275 280 Gly Cys Pro Pro Gly Arg Val Cys Glu Val Lys Ala Glu Ala Arg Asn 295 Cys Trp Ala Thr Arg Gly Leu Cys Val Leu Ser Val Gly Ala Asn Leu

4188

310 315 305 Thr Thr Phe Asp Gly Ala Arg Gly Ala Thr Thr Ser Pro Gly Val Tyr 325 330 Glu Leu Ser Ser Arg Cys Pro Gly Leu Gln Asn Thr Ile Pro Trp Tyr 345 Arg Val Val Ala Glu Val Gln Ile Cys His Gly Lys Thr Glu Ala Val 360 355 Gly Gln Val His Ile Phe Phe Gln Asp Gly Met Val Thr Leu Thr Pro 370 375 Asn Lys Gly Val Trp Val Asn Gly Leu Arg Val Asp Leu Pro Ala Glu 395 Lys Leu Ala Ser Val Ser Val Ser Arg Thr Pro Asp Gly Ser Leu Leu 405 410 Val Arg Gln Lys Ala Gly Val Gln Val Trp Leu Gly Ala Asn Gly Lys 420 425 Val Ala Val Ile Val Ser Asn Asp His Ala Gly Lys Leu Cys Gly Ala 440 Cys Gly Asn Phe Asp Gly Asp Gln Thr Asn Asp Trp His Asp Ser Gln 455 460 Glu Lys Pro Ala Met Glu Lys Trp Arg Ala Gln Asp Phe Ser Pro Cys 470 475 480 Tyr Gly <210> 4618 <211> 552 <212> PRT <213> Homo sapiens <400> 4618 Thr Val Gly Ser Asp Arg Asp Thr Leu Ala Lys Arg Leu Pro Ala Ala 5 10 15 Ala Ser Gly Gly Thr Ser Ile Cys Ser Gly Leu Arg Ser Ala Phe Thr 20 Val Ile Arg Lys Lys Tyr Pro Thr Asp Gly Ser Glu Ile Val Leu Leu 40 45 35

Thr	Asp 50	Gly	Glu	Asp	Asn	Thr 55	Ile	Ser	Gly	Сув	Phe 60	Asn	Glu	Val	Lys
Gln 65	Ser	Gly	Ala	Ile	Ile 70	His	Thr	Val	Ala	Leu 75	Gly	Pro	Ser	Ala	Ala 80
Gln	Glu	Leu	Glu	Glu 85	Leu	Ser	Lys	Met	Thr 90	Gly	Gly	Leu	Gln	Thr 95	Tyr
Ala	Ser	Asp	Gln 100	Val	Gln	Asn	Asn	Gly 105	Leu	Ile	Asp	Ala	Phe 110	Gly	Ala
Leu	Ser	Ser 115	Gly	Asn	Gly	Ala	Val 120	Ser	Gln	Arg	Ser	Ile 125	Gln	Leu	Glu
Ser	Lys 130	Gly	Leu	Thr	Leu	Gln 135	Asn	Ser	Gln	Trp	Met 140	Asn	Gly	Thr	Val
Ile 145	Val	Asp	Ser	Thr	Val 150	Gly	Lys	Asp	Thr	Leu 155	Phe	Leu	Ile	Thr	Trp 160
Thr	Thr	Gln	Pro	Pro 165	Gln	Ile	Leu	Leu	Trp 170	Asp	Pro	Ser	Gly	Gln 175	Lys
Gln	Gly	Gly	Phe 180	Val	Val	Asp	Lys	Asn 185	Thr	Lys	Met	Ala	Tyr 190	Leu	Gln
Ile	Pro	Gly 195	Ile	Ala	Lys	Val	Gly 200	Thr	Trp	Lys	Tyr	Ser 205	Leu	Gln	Ala
Ser	Ser 210	Gln	Thr	Leu	Thr	Leu 215	Thr	Val	Thr	Ser	Arg 220	Ala	Ser	Asn	Ala
Thr 225	Leu	Pro	Pro	Ile	Thr 230	Val	Thr	Ser	Lys	Thr 235	Asn	Lys	Asp	Thr	Ser 240
Lys	Phe	Pro	Ser	Pro 245	Leu	Val	Val	Tyr	Ala 250	Asn	Ile	Arg	Gln	Gly 255	Ala
Ser	Pro	Ile	Leu 260	Arg	Ala	Ser	Val	Thr 265	Ala	Leu	Ile	Glu	Ser 270	Val	Asn
Gly	Lys	Thr 275	Val	Thr	Leu	Glu	Leu 280	Leu	Asp	Asn	Gly	Ala 285	Gly	Ala	Asp
Ala	Thr 290	Lys	Asp	Asp	Gly	Val 295	Tyr	Ser	Arg	Tyr	Phe 300	Thr	Thr	Tyr	Asp
Thr 305	Asn	Gly	Arg	Tyr	Ser 310	Val	Lys	Val	Arg	Ala 315	Leu	Gly	Gly	Val	Asn 320

4190

Ala Ala Arg Arg Val Ile Pro Gln Gln Ser Gly Ala Leu Tyr Ile 325 330 Pro Gly Trp Ile Glu Asn Asp Glu Ile Gln Trp Asn Pro Pro Arg Pro Glu Ile Asn Lys Asp Asp Val Gln His Lys Gln Val Cys Phe Ser Arg 360 Thr Ser Ser Gly Gly Ser Phe Val Ala Ser Asp Val Pro Asn Ala Pro 370 375 Ile Pro Asp Leu Phe Pro Pro Gly Gln Ile Thr Asp Leu Lys Ala Glu 385 390 395 Ile His Gly Gly Ser Leu Ile Asn Leu Thr Trp Thr Ala Pro Gly Asp 405 410 Asp Tyr Asp His Gly Thr Ala His Lys Tyr Ile Ile Arg Ile Ser Thr 425 Ser Ile Leu Asp Leu Arg Asp Lys Phe Asn Glu Ser Leu Gln Val Asn 435 440 Thr Thr Ala Leu Ile Pro Lys Glu Ala Asn Ser Glu Glu Val Phe Leu 455 Phe Lys Pro Glu Thr Ile Thr Phe Glu Asn Gly Thr Asp Leu Phe Ile 475 470 Ala Ile Gln Ala Val Asp Lys Val Asp Leu Lys Ser Glu Ile Ser Asn 485 490 Ile Ala Arg Val Ser Leu Phe Ile Pro Pro Gln Thr Pro Pro Glu Thr 500 Pro Ser Pro Asp Glu Thr Ser Ala Pro Cys Pro Asn Ile His Ile Asn 515 520 Ser Thr Ile Pro Gly Ile His Ile Leu Lys Ile Met Trp Lys Trp Ile 535 540 Gly Glu Leu Gln Leu Ser Ile Ala 545 550

<210> 4619

<211> 501

<212> PRT

4191 ·

<213> Homo sapiens														
<220> <221> SITE <222> (179) <223> Xaa equals any of the naturally occurring L-amino acids														
<pre><400> 4619 Gly Thr Ser Gly Gly Gly Ala Gly Ala Met Ala Val Leu Leu Glu Th</pre>	ır													
Thr Leu Gly Asp Val Val Ile Asp Leu Tyr Thr Glu Glu Arg Pro Ar 20 25 30	:g													
Ala Cys Leu Asn Phe Leu Lys Leu Cys Lys Ile Lys Tyr Tyr Asn Ty 35 40 45	ŗr													
Cys Leu Ile His Asn Val Gln Arg Asp Phe Ile Ile Gln Thr Gly As 50 55 60	g≨													
Pro Thr Gly Thr Gly Arg Gly Gly Glu Ser Ile Phe Gly Gln Leu Ty 65 70 75 8	yr 30													
Gly Asp Gln Ala Ser Phe Phe Glu Ala Glu Lys Val Pro Arg Ile Ly 85 90 95	/S													
His Lys Lys Lys Gly Thr Val Ser Met Val Asn Asn Gly Ser Asp Gl 100 105 110	ln													
His Gly Ser Gln Phe Leu Ile Thr Thr Gly Glu Asn Leu Asp Tyr Le 115 120 125	∍u													
Asp Gly Val His Thr Val Phe Gly Glu Val Thr Glu Gly Met Asp II 130 135 140	le													
Ile Lys Lys Ile Asn Glu Thr Phe Val Asp Lys Asp Phe Val Pro Ty 145 150 155 16	yr 60													
Gln Asp Ile Arg Ile Asn His Thr Val Ile Leu Asp Asp Pro Phe As 165 170 175	gp													
Asp Pro Xaa Asp Leu Leu Ile Pro Asp Arg Ser Pro Glu Pro Thr Ar 180 185 190	rg													
Glu Gln Leu Asp Ser Gly Arg Ile Gly Ala Asp Glu Glu Ile Asp As 195 200 205	sp													
Phe Lys Gly Arg Ser Ala Glu Glu Val Glu Glu Ile Lys Ala Glu Ly 210 215 220	λs													
Glu Ala Lys Thr Gln Ala Ile Leu Leu Glu Met Val Gly Asp Leu Pr	ro													

225					230					235					240
Asp	Ala	Asp	Ile	Lys 245	Pro	Pro	Glu	Asn	Val 250	Leu	Phe	Val	Cys	Lys 255	Leu
Asn	Pro	Val	Thr 260	Thr	Asp	Glu	Asp	Leu 265	Glu	Ile	Ile	Phe	Ser 270	Arg	Phe
Gly	Pro	Ile 275	Arg	Ser	Cys	Glu	Val 280	Ile	Arg	Asp	Trp	Lys 285	Thr	Gly	Glu
Ser	Leu 290	Cys	Tyr	Ala	Phe	Ile 295	Glu	Phe	Glu	Lys	Glu 300	Glu	Asp	Cys	Glu
Lys 305	Ala	Phe	Phe	Lys	Met 310	Asp	Asn	Val	Leu	Ile 315	Asp	Asp	Arg	Arg	Ile 320
His	Val	Asp	Phe	Ser 325	Gln	Ser	Val	Ala	Lys 330	Val	Lys	Trp	Lys	Gly 335	Lys
Gly	Gly	Lys	Tyr 340	Thr	Lys	Ser	Asp	Phe 345	Lys	Glu	Tyr	Glu	Lys 350	Glu	Gln
Asp	Lys	Pro 355	Pro	Asn	Leu	Val	Leu 360	Lys	Asp	Lys	Val	Lys 365	Pro	Lys	Gln
Asp	Thr 370	Lys	Tyr	Asp	Leu	Ile 375	Leu	Asp	Glu	Gln	Ala 380	Glu	Asp	Ser	Lys
Ser 385	Ser	His	Ser	His	Thr 390	Ser	Lys	Lys	His	Lys 395	Lys	Lys	Thr	His	His 400
Cys	Ser	Glu	Glu	Lys 405	Glu	Asp	Glu	Asp	Tyr 410	Met	Pro	Ile	Lys	Asn 415	Thr
Asn	Gln	Asp	Ile 420	Tyr	Arg	Glu	Met	Gly 425	Phe	Gly	His	Tyr	Glu 430	Glu	Glu
Glu	Ser	Cys 435	Trp	Glu	Lys	Gln	Lys 440	Ser	Glu	Lys	Arg	Asp 445	Arg	Thr	Gln
Asn	Arg 450	Ser	Arg	Ser	Arg	Ser 455	Arg	Glu	Arg	Asp	Gly 460	His	Tyr	Ser	Asn
Ser 465	His	Lys	Ser	Lys	Tyr 470	Gln	Thr	Asp	Leu	Туг 475	Glu	Arg	Glu	Arg	Ser 480
Lys	Lys	Arg	Asp	Arg 485	Ser	Arg	Ser	Pro	Lys 490	Lys	Ser	Lys	Asp	Lys 495	Glu
Lys	Ser	Lys	Tyr	Arg											

4193

500

<210> 4620 <211> 63

<212> PRT

<213> Homo sapiens

<400> 4620

Asn Phe Leu Leu Phe Thr Asn Ser Asp Glu Ile Gln Phe Phe Arg Arg

1 5 10 15

Leu Ser Phe Leu Glu Gln Ala Thr Ser Leu Pro Leu Glu Cys Pro Ile
20 25 30

Thr Tyr Ser Ser Thr Phe Ser Phe Cys Ser Arg Cys Leu Leu Lys Arg 35 40 45

Ser Gly Ala Val Gly Gly Tyr Ala His Leu Ser Ser Ser Val Gln 50 55 60

<210> 4621

<211> 50

<212> PRT

<213> Homo sapiens

<400> 4621

Ser Gln His Phe Gly Arg Pro Arg Trp Thr Asp His Leu Arg Ser Gly
1 5 10 15

Val Arg Asp Gln Pro Gly Gln His Gly Gln Thr Trp Ser Leu Leu Lys 20 25 30

Ile Gln Lys Leu Ala Gly Val Ala Arg Cys Arg Ala Val Trp Gly Arg 40 45

His Gly 50

<210> 4622

<211> 81

<212> PRT

<213> Homo sapiens

<400> 4622

Gly Thr Arg Trp Pro Cys Gly Lys His Lys Arg Val Leu Ile Phe Pro

4194

10 Ser Tyr Met Thr Thr Val Ile Asp Tyr Val Lys Pro Ser Asp Leu Lys 25 Lys Asp Met Asn Glu Thr Phe Lys Glu Lys Phe Pro His Ile Lys Leu 40 Thr Leu Ser Lys Ile Arg Ser Leu Lys Arg Glu Met Arg Asn Leu Arg 50 55 Arg Arg Thr Val Ala Leu Arg Ser Pro Arg Trp Pro Trp Pro Arg Leu 70 75 Leu <210> 4623 <211> 139 <212> PRT <213> Homo sapiens <400> 4623 Ser Gln His Phe Leu Ser Leu Pro Leu Trp Phe Glu Gly Tyr Gly Leu Leu Gln Tyr Ile Ser Ser Phe Lys Ser Cys His Cys Phe Val Gly Pro 20 25 Gln Leu Ile Gly Pro Gln Asn Lys Pro Cys Cys Phe Ala His Thr Leu 40 Ala Phe Phe Cys Thr Phe His Ser Gly Trp Ala Trp Pro Lys Gln Ala 50 55 Gln Ala Lys Asp Leu Pro Ser Cys Met Tyr Phe Gln Tyr Pro Glu Thr 65 75 Val Phe Gly Asp Ile Met Pro Arg Val Asn Lys Pro Asp Leu Gly Thr 85 90 Ala Leu Ser Arg Gly Phe Thr His Glu Ile Asn Lys Thr Tyr Leu Ser 100 105 His Leu Lys Leu Gly Ser Gln Lys Thr His Phe Trp Phe Ile Ile Ser 115 120 125 Phe Tyr Ala His Leu Thr Leu Ile Ile Tyr Pro

135

4195

<210> 4624 <211> 90 <212> PRT <213> Homo sapiens <400> 4624 Gly Thr Arg Arg His Pro Ala Pro Ser Ala Gly Cys Ala Ser Gly Ala Glu Val Arg Asp Lys Met Val Pro Pro Val Gln Val Ser Pro Leu Ile 25 Lys Leu Gly Arg Tyr Ser Ala Leu Phe Leu Gly Val Ala Tyr Gly Ala 35 40 Thr Arg Tyr Asn Tyr Leu Lys Pro Arg Ala Glu Glu Arg Arg Ile Ala Ala Glu Glu Lys Lys Gln Asp Glu Leu Lys Arg Ile Ala Arg 70 75 Glu Leu Ala Glu Asp Asp Ser Ile Leu Lys 85 <210> 4625 <211> 328 <212> PRT <213> Homo sapiens <400> 4625 Gln Ala Thr Gly Gly Pro Glu Leu Ala Ser Ser Val Leu Ser Pro Leu 1.0 Leu Asn Lys Asp Thr Ile Asp Phe Leu Asn Tyr Thr Val Asn Gly Asp Glu Arg Gln Leu Trp Met Ser Leu Gly Gly Thr Trp Met Lys Ala Arg 35 40 Ala Glu Trp Pro Lys Glu Gln Phe Ile Pro Pro Tyr Val Pro Arg Phe 50 55 60 Arg Asn Gly Trp Glu Pro Pro Met Leu Asn Phe Met Gly Ala Thr Met 70 75

Glu Gln Asp Leu Tyr Gln Leu Ala Glu Ser Val Ala Asn Val Ala Glu

4196

				85					90					95	
His	Gln	Arg	Lys 100	Gln	Glu	Ile	Lys	Arg 105	Leu	Ser	Thr	Glu	His 110	Ser	Ser
Val	Ser	Glu 115	Tyr	His	Pro	Ala	Asp 120	Gly	Tyr	Ala	Phe	Ser 125	Ser	Asn	Ile
Tyr	Thr 130	Arg	Gly	Ser	His	Leu 135	Asp	Gln	Gly	Glu	Ala 140	Ala	Val	Ala	Phe
Lys 145	Pro	Thr	Ser	Asn	Arg 150	His	Ile	Asp	Arg	Asn 155	Tyr	Glu	Pro	Leu	Lys 160
Thr	Gln	Pro	Lys	Lys 165	Туr	Ala	Lys	Ser	Lys 170	Tyr	Asp	Phe	Val	Ala 175	Arg
Asn	Asn	Ser	Glu 180	Leu	Ser	Val	Leu	Lys 185	Asp	Asp	Ile	Leu	Glu 190	Ile	Leu
Asp	Asp	Arg 195	Lys	Gln	Trp	Trp	Lys 200	Val	Arg	Asn	Ala	Ser 205	Gly	Asp	Ser
Gly	Phe 210	Val	Pro	Asn	Asn	Ile 215	Leu	Asp	Ile	Val	Arg 220	Pro	Pro	Glu	Ser
Gly 225	Leu	Gly	Arg	Ala	Asp 230	Pro	Pro	Tyr	Thr	His 235	Thr	Ile	Gln	Lys	Gln 240
Arg	Met	Glu	Tyr	Gly 245	Pro	Arg	Pro	Ala	Asp 250	Thr	Pro	Pro	Ala	Pro 255	Ser
Pro	Pro	Pro	Thr 260	Pro	Ala	Pro	Val	Pro 265	Val	Pro	Leu	Pro	Pro 270	Ser	Thr
Pro	Ala	Pro 275	Val	Pro	Val	Ser	Lys 280		Pro	Ala	Asn	Ile 285	Thr	Arg	Gln
Asn	Ser 290	Ser	Ser	Ser	Asp	Ser 295	Gly	Gly	Ser	Ile	Val 300	Arg	Asp	Ser	Gln
Arg 305	His	Lys	Gln	Leu	Pro 310	Val	Asp	Arg	Arg	Asn 315	Leu	Arg	Trp	Arg	Lys 320
Cys	Lys	Met	Asn	Ser 325	Ser	Thr	Asp								

<210> 4626 <211> 578

4197

<212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (36) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (74) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (81) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (89) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4626 Gly Val Gly Asp Gly Gln Ala Pro Met Pro Gly Xaa Thr Glu Glu Pro 5 10 15 Arg Pro Pro Glu Gln Gln Asp Gln Glu Gly Gly Glu Ala Ala Lys Ala 20 Ala Pro Glu Xaa Pro Gln Gln Arg Pro Pro Glu Ala Val Ala Ala Ala 40 Pro Ala Gly Thr Thr Ser Ser Arg Val Leu Arg Gly Gly Arg Asp Arg 55 Gly Arg Ala Ala Ala Arg Arg Arg Xaa Ser Cys Val Pro Pro Glu 65 Xaa Gly Arg Val Ser Pro Pro Ala Xaa Glu Gln Pro Gln Arg Gln Ala 85 90 Ser Arg Arg Pro Arg Ala Ala Ala Gln Ala Ala Lys Ser Pro Ser Pro 105 Val Gln Gly Lys Lys Ser Pro Arg Leu Leu Cys Ile Glu Lys Val Thr

		115					120					125			
Thr	Asp 130	Lys	Asp	Pro	Lys	Glu 135	Glu	Lys	Glu	Glu	Glu 140	Asp	Asp	Ser	Ala
Leu 145	Pro	Gln	Glu	Val	Ser 150	Ile	Ala	Ala	Ser	Arg 155	Pro	Ser	Arg	Gly	Trp 160
Arg	Ser	Ser	Arg	Thr 165	Ser	Val	Ser	Arg	His 170	Arg	Asp	Thr	Glu	Asn 175	Thr
Arg	Ser	Ser	Arg 180	Ser	Lys	Thr	Gly	Ser 185	Leu	Gln	Leu	Ile	Cys 190	Lys	Ser
Glu	Pro	Asn 195	Thr	Asp	Gln	Leu	Asp 200	Tyr	Asp	Val	Gly	Glu 205	Glu	His	Gln
Ser	Pro 210	Gly	Gly	Ile	Ser	Ser 215	Glu	Glu	Glu	Glu	Glu 220	Glu	Glu	Glu	Glu
Met 225	Leu	Ile	Ser	Glu	Glu 230	Glu	Ile	Pro	Phe	Lys 235	Asp	Asp	Pro	Arg	Asp 240
Glu	Thr	Tyr	Lys	Pro 245	His	Leu	Glu	Arg	Glu 250	Thr	Pro	Lys	Pro	Arg 255	Arg
Lys	Ser	Gly	Lys 260	Val	Lys	Glu	Glu	Lys 265	Glu	Lys	Lys	Glu	Ile 270	Lys	Val
Glu	Val	Glu 275	Val	Glu	Val	Lys	Glu 280	Glu	Glu	Asn	Glu	Ile 285	Arg	Glu	Asp
Glu	Glu 290	Pro	Pro	Arg	Lys	Arg 295	Gly	Arg	Arg	Arg	Lys 300	Asp	Asp	Lys	Ser
Pro 305	Arg	Leu	Pro	Lys	Arg 310	Arg	Lys	Lys	Pro	Pro 315	Ile	Gln	Tyr	Val	Arg 320
Cys	Glu	Met	Glu	Gly 325	Cys	Gly	Thr	Val	Leu 330	Ala	His	Pro	Arg	Tyr 335	Leu
Gln	His	His	Ile 340	Lys	Tyr	Gln	His	Leu 345	Leu	Lys	Lys	Lys	Туr 350	Val	Cys
Pro	His	Pro 355	Ser	Cys	Gly	Arg	Leu 360	Phe	Arg	Leu	Gln	Lys 365	Gln	Leu	Leu
Arg	His 370	Ala	Lys	His	His	Thr 375	Asp	Gln	Arg	Asp	Туr 380	Ile	Cys	Glu	Tyr
Cys	Ala	Arg	Ala	Phe	Lys	Ser	Ser	His	Asn	Leu	Ala	Val	His	Arg	Met

4199

390 395 400 385 Ile His Thr Gly Glu Lys Pro Leu Gln Cys Glu Ile Cys Gly Phe Thr 410 405 Cys Arg Gln Lys Ala Ser Leu Asn Trp His Met Lys Lys His Asp Ala 425 Asp Ser Phe Tyr Gln Phe Ser Cys Asn Ile Cys Gly Lys Lys Phe Glu 440 445 435 Lys Lys Asp Ser Val Val Ala His Lys Ala Lys Ser His Pro Glu Val 450 455 460 Leu Ile Ala Glu Ala Leu Ala Ala Asn Ala Gly Ala Leu Ile Thr Ser 475 Thr Asp Ile Leu Gly Thr Asn Pro Glu Ser Leu Thr Gln Pro Ser Asp 485 490 Gly Gln Gly Leu Pro Leu Pro Glu Pro Leu Gly Asn Ser Thr Ser 500 505 Gly Glu Cys Leu Leu Glu Ala Glu Gly Met Ser Lys Ser Tyr Cys 520 Ser Gly Thr Glu Arg Val Ser Leu Met Ala Asp Gly Lys Ile Phe Val 535 540 Gly Ser Gly Ser Ser Gly Gly Thr Glu Gly Leu Val Met Asn Ser Asp 545 550 555 560 Ile Leu Gly Ala Thr Thr Glu Val Leu Ile Glu Asp Ser Asp Ser Ala 570 565 Gly Pro <210> 4627 <211> 263 <212> PRT <213> Homo sapiens <400> 4627 Lys Ile Met Ala Ser Pro Asp Trp Gly Tyr Asp Asp Lys Asn Gly Pro Glu Gln Trp Ser Lys Leu Tyr Pro Ile Ala Asn Gly Asn Asn Gln Ser 20 25

4200

Pro Val Asp Ile Lys Thr Ser Glu Thr Lys His Asp Thr Ser Leu Lys 35 40 Pro Ile Ser Val Ser Tyr Asn Pro Ala Thr Ala Lys Glu Ile Ile Asn 55 Val Gly His Ser Phe His Val Asn Phe Glu Asp Asn Asp Asn Arg Ser 70 75 Val Leu Lys Gly Gly Pro Phe Ser Asp Ser Tyr Arg Leu Phe Gln Phe 90 85 His Phe His Trp Gly Ser Thr Asn Glu His Gly Ser Glu His Thr Val 100 105 Asp Gly Val Lys Tyr Ser Ala Glu Leu His Val Ala His Trp Asn Ser 120 Ala Lys Tyr Ser Ser Leu Ala Glu Ala Ala Ser Lys Ala Asp Gly Leu 135 Ala Val Ile Gly Val Leu Met Lys Val Gly Glu Ala Asn Pro Lys Leu 145 150 155 Gln Lys Val Leu Asp Ala Leu Gln Ala Ile Lys Thr Lys Gly Lys Arg 165 Ala Pro Phe Thr Asn Phe Asp Pro Ser Thr Leu Leu Pro Ser Ser Leu 185 Asp Phe Trp Thr Tyr Pro Gly Ser Leu Thr His Pro Pro Leu Tyr Glu 200 205 195 Ser Val Thr Trp Ile Ile Cys Lys Glu Ser Ile Ser Val Ser Ser Glu 210 215 Gln Leu Ala Gln Phe Arg Ser Leu Leu Ser Asn Val Glu Gly Asp Asn 225 230 235 Ala Val Pro Met Gln His Asn Asn Arg Pro Thr Gln Pro Leu Lys Gly 250 245

Arg Thr Val Arg Ala Ser Phe 260

<210> 4628

<211> 301

<212> PRT

4201

<213> Homo sapiens <220> <221> SITE <222> (156) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (185) <223> Xaa equals any of the naturally occurring L-amino acids Ala Asp Ala Trp Gly Arg Thr Ala Glu Leu Thr Val Thr Ala Ala Leu Thr Arg Glu Phe Leu Glu Pro Lys Leu Phe Ser Thr Glu Asp Lys Gln 25 Ala Ala Glu Thr Met Gly Ser Pro Ser Ala Cys Pro Tyr Arg Val Cys 40 Ile Pro Trp Gln Gly Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp 50 55 Asn Leu Pro Asn Ser Ala Gln Thr Asn Ile Asp Val Val Pro Phe Asn 65 Val Ala Glu Gly Lys Glu Val Leu Leu Val Val His Asn Glu Ser Gln 85 90 Asn Leu Tyr Gly Tyr Asn Trp Tyr Lys Gly Glu Arg Val His Ala Asn 105 110 Tyr Arg Ile Ile Gly Tyr Val Lys Asn Ile Ser Gln Glu Asn Ala Pro 115 120 Gly Pro Ala His Asn Gly Arg Glu Thr Ile Tyr Pro Asn Gly Thr Leu 130 135 140 Leu Ile Gln Asn Val Thr His Asn Asp Ala Gly Xaa Tyr Thr Leu His 150 155 Val Ile Lys Glu Asn Leu Val Asn Glu Glu Val Thr Arg Gln Phe Tyr 165 Val Phe Ser Glu Pro Pro Lys Pro Xaa Ile Thr Ser Asn Asn Phe Asn 180 185 Pro Val Glu Asn Lys Asp Ile Val Val Leu Thr Cys Gln Pro Glu Thr 195 200 205

4202

Gln Asn Thr Thr Tyr Leu Trp Trp Val Asn Asn Gln Ser Leu Leu Val 210 215 220

Ser Pro Arg Leu Leu Ser Thr Asp Asn Arg Thr Leu Val Leu Leu 225 230 235 240

Ser Ala Thr Lys Asn Asp Ile Gly Pro Tyr Glu Cys Glu Ile Gln Asn 245 250 255

Pro Val Gly Ala Ser Arg Ser Asp Pro Val Thr Leu Asn Val Arg Tyr 260 265 270

Glu Ser Val Gln Ala Ser Ser Pro Asp Leu Ser Ala Gly Thr Ala Val 275 280 285

Ser Ile Met Ile Gly Val Leu Ala Gly Met Ala Leu Ile 290 295 300

<210> 4629

<211> 256

<212> PRT

<213> Homo sapiens

<400> 4629

Pro Ala Gly Ala Gly Cys Arg Ala Gly Glu Arg Ala Gly Gln Ala Lys

1 5 10 15

Ala Leu Val Pro Ala Arg Cys Gly Pro Gln Ser Ala Ala Met Gly Ala 20 25 30

Ser Ala Arg Leu Leu Arg Ala Val Ile Met Gly Ala Pro Gly Ser Gly 35 40 45

Lys Gly Thr Val Ser Ser Arg Ile Thr Thr His Phe Glu Leu Lys His 50 55 60

Leu Ser Ser Gly Asp Leu Leu Arg Asp Asn Met Leu Arg Gly Thr Glu 65 70 75 80

Ile Gly Val Leu Ala Lys Ala Phe Ile Asp Gln Gly Lys Leu Ile Pro 85 90 95

Asp Asp Val Met Thr Arg Leu Ala Leu His Glu Leu Lys Asn Leu Thr 100 105 110

Gln Tyr Ser Trp Leu Leu Asp Gly Phe Pro Arg Thr Leu Pro Gln Ala 115 120 125

4203

Glu Ala Leu Asp Arg Ala Tyr Gln Ile Asp Thr Val Ile Asn Leu Asn 130 135 140

Val Pro Phe Glu Val Ile Lys Gln Arg Leu Thr Ala Arg Trp Ile His 145 150 155 160

Pro Ala Ser Gly Arg Val Tyr Asn Ile Glu Phe Asn Pro Pro Lys Thr 165 170 175

Val Gly Ile Asp Asp Leu Thr Gly Glu Pro Leu Ile Gln Arg Glu Asp 180 185 190

Asp Lys Pro Glu Thr Val Ile Lys Arg Leu Lys Ala Tyr Glu Asp Gln 195 200 205

Thr Lys Pro Val Leu Glu Tyr Tyr Gln Lys Lys Gly Val Leu Glu Thr 210 215 220

Phe Ser Gly Thr Glu Thr Asn Lys Ile Trp Pro Tyr Val Tyr Ala Phe 225 230 235 240

Leu Gln Thr Lys Val Pro Gln Arg Ser Gln Lys Ala Ser Val Thr Pro 245 250 255

<210> 4630

<211> 102

<212> PRT

<213> Homo sapiens

<400> 4630

Asp Trp Gly Leu Ala Arg Ser Arg Pro Gly Cys Lys Cys Cys Gly Gly
1 5 10 15

Arg Lys Ser Arg Pro His Arg Arg Gly Ser Ala Val Met Pro Lys Tyr 20 . 25 30

Tyr Glu Asp Lys Pro Gln Ala Ala Arg Cys Ala Gly Leu Lys Glu Asp 35 40 45

Leu Gly Ala Cys Leu Leu Gln Ser Asp Cys Val Val Gln Glu Gly Lys 50 55 60

Ser Pro Arg Gln Cys Leu Lys Glu Gly Tyr Cys Asn Ser Leu Lys Tyr 65 70 75 80

Ala Phe Phe Glu Cys Lys Arg Ser Val Leu Asp Asn Arg Ala Arg Phe

4204

85 90 95

Arg Gly Arg Lys Gly Tyr 100

<210> 4631 <211> 466 <212> PRT <213> Homo sapiens <400> 4631 Glu His Gln Glu Ile Met Asn Asn Phe Gly Asn Glu Glu Phe Asp Cys His Phe Leu Asp Glu Gly Phe Thr Ala Lys Asp Ile Leu Asp Gln Lys Ile Asn Glu Val Ser Ser Ser Asp Asp Lys Asp Ala Phe Tyr Val Ala 40 Asp Leu Gly Asp Ile Leu Lys Lys His Leu Arg Trp Leu Lys Ala Leu 50 55 60 Pro Arg Val Thr Pro Phe Tyr Ala Val Lys Cys Asn Asp Ser Lys Ala 70 65 Ile Val Lys Thr Leu Ala Ala Thr Gly Thr Gly Phe Asp Cys Ala Ser 90 Lys Thr Glu Ile Gln Leu Val Gln Ser Leu Gly Val Pro Pro Glu Arg 105 110 100 Ile Ile Tyr Ala Asn Pro Cys Lys Gln Val Ser Gln Ile Lys Tyr Ala 115 120 Ala Asn Asn Gly Val Gln Met Met Thr Phe Asp Ser Glu Val Glu Leu 140 135

Met Lys Val Ala Arg Ala His Pro Lys Ala Lys Leu Val Leu Arg Ile

Ala Thr Asp Asp Ser Lys Ala Val Cys Arg Leu Ser Val Lys Phe Gly

Ala Thr Leu Arg Thr Ser Arg Leu Leu Glu Arg Ala Lys Glu Leu

Asn Ile Asp Val Gly Val Ser Phe His Val Gly Ser Gly Cys Thr

200

150

165

180

195

155

170

Asp	Pro 210	Glu	Thr	Phe	Val	Gln 215	Ala	Ile	Ser	Asp	Ala 220	Arg	Суз	Val	Phe
Asp 225	Met	Gly	Ala	Glu	Val 230	Gly	Phe	Ser	Met	Tyr 235	Leu	Leu	Asp	Ile	Gly 240
Gly	Gly	Phe	Pro	Gly 245	Ser	Glu	Asp	Val	Lys 250	Leu	Lys	Phe	Glu	Glu 255	Ile
Thr	Gly	Val	Ile 260	Asn	Pro	Ala	Leu	Asp 265	Lys	Tyr	Phe	Pro	Ser 270	Asp	Ser
Gly	Val	Arg 275	Ile	Ile	Ala	Glu	Pro 280	Gly	Arg	Tyr	Tyr	Val 285	Ala	Ser	Ala
Phe	Thr 290	Leu	Ala	Val	Asn	Ile 295	Ile	Ala	Lys	Lys	Ile 300	Val	Leu	Lys	Glu
Gln 305	Thr	Gly	Ser	Asp	Asp 310	Glu	Asp	Glu	Ser	Ser 315	Glu	Gln	Thr	Phe	Met 320
Tyr	Tyr	Val	Asn	Asp 325	Gly	Val	Tyr	Gly	Ser 330	Phe	Asn	Cys	Ile	Leu 335	Tyr
Asp	His	Ala	His 340	Val	Lys	Pro	Leu	Leu 345	Gln	Lys	Arg	Pro	Lys 350	Pro	Asp
Glu	Lys	Туr 355	Tyr	Ser	Ser	Ser	Ile 360	Trp	Gly	Pro	Thr	Cys 365	Asp	Gly	Leu
Asp	Arg 370	Ile	Val	Glu	Arg	Cys 375	Asp	Leu	Pro	Glu	Met 380	His	Val	Gly	Asp
Trp 385	Met	Leu	Phe	Glu	Asn 390	Met	Gly	Ala	Tyr	Thr 395	Val	Ala	Ala	Ala	Ser 400
Thr	Phe	Asn	Gly	Phe 405	Gln	Arg	Pro	Thr	Ile 410	Tyr	Tyr	Val	Met	Ser 415	Gly
Pro	Ala	Trp	Gln 420	Leu	Met	Gln	Gln	Phe 425	Gln	Asn	Pro	Asp	Phe 430	Pro	Pro
Glu	Val	Glu 435	Glu	Gln	Asp	Ala	Ser 440	Thr	Leu	Pro	Va1	Ser 445	Cys	Ala	Trp
Glu	Ser 450	Gly	Met	Lys	Arg	His 455	Arg	Ala	Ala	Cys	Ala 460	Ser	Ala	Ser	Ile
Asn 465	Val														

4206

<210> 4632

<211> 178

<212> PRT

<213> Homo sapiens

<400> 4632

Asn Ser Ala Arg Gly His Cys Trp Leu Arg Leu Arg Ser Gly Pro Trp 1 5 10 15

Ile Ser Ser Lys Met Ala Ala Arg Ser Val Ser Gly Ile Thr Arg Arg 20 25 30

Val Phe Met Trp Thr Val Ser Gly Thr Pro Cys Arg Glu Phe Trp Ser 35 40 45

Arg Phe Arg Lys Glu Lys Glu Pro Val Val Glu Thr Val Glu Glu 50 55 60

Lys Lys Glu Pro Ile Leu Val Cys Pro Pro Leu Arg Ser Arg Ala Tyr 65 70 75 80

Thr Pro Pro Glu Asp Leu Gln Ser Arg Leu Glu Ser Tyr Val Lys Glu 85 90 95

Val Phe Gly Ser Ser Leu Pro Ser Asn Trp Gln Asp Ile Ser Leu Glu 100 105 110

Asp Ser Arg Leu Lys Phe Asn Leu Leu Ala His Leu Ala Asp Asp Leu 115 120 125

Gly His Val Val Pro Asn Ser Arg Leu His Gln Met Cys Arg Val Arg 130 135 140

Asp Glu Leu Ser Ala Ser Asn Leu Pro Pro Asn Leu Lys Ile Thr Trp
165 170 175

Ser Tyr

<210> 4633

<211> 273

<212> PRT

<213> Homo sapiens

<400)> 46	533													
Arg 1	Pro	Ala	Pro	Ala 5	Gly	Ala	Arg	Pro	Pro 10	Leu	Ile	Pro	Asp	Pro 15	Ala
Val	Gly	Ala	Met 20	Ala	Glu	Ala	Val	Leu 25	Arg	Val	Ala	Arg	Arg 30	Gln	Leu
Ser	Gln	Arg 35	Gly	Gly	Ser	Gly	Ala 40	Pro	Ile	Leu	Leu	Arg 45	Gln	Met	Phe
Glu	Pro 50	Val	Ser	Cys	Thr	Phe 55	Thr	Tyr	Leu	Leu	Gly 60	Asp	Arg	Glu	Ser
Arg 65	Glu	Ala	Val	Leu	Ile 70	Asp	Pro	Val	Leu	Glu 75	Thr	Ala	Pro	Arg	Asp 80
Ala	Gln	Leu	Ile	Lys 85	Glu	Leu	Gly	Leu	Arg 90	Leu	Leu	Tyr	Ala	Val 95	Asn
Thr	His	Cys	His 100	Ala	Asp	His	Ile	Thr 105	Gly	Ser	Gly	Leu	Leu 110	Arg	Ser
Leu	Leu	Pro 115	Gly	Cys	Gln	Ser	Val 120	Ile	Ser	Arg	Leu	Ser 125	Gly	Ala	Gln
Ala	Asp 130	Leu	His	Ile	Glu	Asp 135	Gly	Asp	Ser	Ile	Arg 140	Phe	Gly	Arg	Phe
Ala 145	Leu	Glu	Thr	Arg	Ala 150	Ser	Pro	Gly	His	Thr 155	Pro	Gly	Cys	Val	Thr
Phe	Val	Leu	Asn	Asp 165	His	Ser	Met	Ala	Phe 170	Thr	Gly	Asp	Ala	Leu 175	Leu
Ile	Arg	Gly	Cys 180	Gly	Arg	Thr	Asp	Phe 185	Gln	Gln	Gly	Cys	Ala 190	Lys	Thr
Leu	Tyr	His 195	Ser	Val	His	Glu	Lys 200	Ile	Phe	Thr	Leu	Pro 205	Gly	Asp	Суя
Leu	Ile 210	Tyr	Pro	Ala	His	Asp 215	Tyr	His	Gly	Phe	Thr 220	Val	Ser	Thr	Va]
Glu 225	Glu	Glu	Arg	Thr	Leu 230	Asn	Pro	Arg	Leu	Thr 235	Leu	Ser	Cys	Glu	Glu 240
Phe	Val	Lys	Ile	Met 245	Gly	Asn	Leu	Asn	Leu 250	Pro	Lys	Pro	Gln	Gln 255	Ile
Asp	Phe	Ala	Val	Pro	Ala	Asn	Met	Arg	Cys	Gly	Val	Gln	Thr	Pro	Thi

4208

260 265 270

Ala

<210> 4634 <211> 311 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (16) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4634 Val Thr Ser Glu Gly Val Arg Val Arg Ser Ser Arg Gly Arg Ala Xaa Gly Val Trp Arg Phe Glu Arg Asp Glu Asp Gly Thr Gly Ala Gly Cys 25 Gly Gln Trp Thr Arg Phe Cys Arg Glu Pro Lys Met Ala Val Asn Val 40 35 Tyr Ser Thr Ser Val Thr Ser Asp Asn Leu Ser Arg His Asp Met Leu 50 55 Ala Trp Ile Asn Glu Ser Leu Gln Leu Asn Leu Thr Lys Ile Glu Gln 70 75 Leu Cys Ser Gly Ala Ala Tyr Cys Gln Phe Met Asp Met Leu Phe Pro 85 90 Gly Ser Ile Ala Leu Lys Lys Val Lys Phe Gln Ala Lys Leu Glu His 100 105 110 Glu Tyr Ile Gln Asn Phe Lys Ile Leu Gln Ala Gly Phe Lys Arg Met 115 120 125 Gly Val Asp Lys Ile Ile Pro Val Asp Lys Leu Val Lys Gly Lys Phe 135 Gln Asp Asn Phe Glu Phe Val Gln Trp Phe Lys Lys Phe Phe Asp Ala 150 155 Asn Tyr Asp Gly Lys Asp Tyr Asp Pro Val Ala Ala Arg Gln Gly Gln

170

. .

175

4209

Glu Thr Ala Val Ala Pro Ser Leu Val Ala Pro Ala Leu Asn Lys Pro 185 Lys Lys Pro Leu Thr Ser Ser Ser Ala Ala Pro Gln Arg Pro Ile Ser 195 200 205 Thr Gln Arg Thr Ala Ala Pro Lys Ala Gly Pro Gly Val Val Arg 210 215 220 Lys Asn Pro Gly Val Gly Asn Gly Asp Asp Glu Ala Ala Glu Leu Met 235 Gln Gln Val Asn Val Leu Lys Leu Thr Val Glu Asp Leu Glu Lys Glu 245 250 Arg Asp Phe Tyr Phe Gly Lys Leu Arg Asn Ile Glu Leu Ile Cys Gln 260 265 270 Glu Asn Glu Gly Glu Asn Asp Pro Val Leu Gln Arg Ile Val Asp Ile 280 Leu Tyr Ala Thr Asp Glu Gly Phe Val Ile Pro Asp Glu Gly Pro 295 300 Gln Glu Glu Glu Glu Tyr 305 310 <210> 4635 <211> 367 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (5) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4635 Asn Ala Met Arg Xaa Ser Gly Asp Ala Phe Asp Ile Gln Arg Cys Tyr 10 Cys Asn Tyr Thr Thr Asp Val Val Ala Ser Val Ala Phe Gly Thr Pro 20 25 30 Val Asp Ser Trp Gln Ala Pro Glu Asp Pro Phe Val Lys His Cys Lys Arg Phe Phe Glu Phe Cys Ile Pro Arg Pro Ile Leu Val Leu Leu

55

60

Ser 65	Phe	Pro	Ser	Ile	Met 70	Val	Pro	Leu	Ala	Arg 75	Ile	Leu	Pro	Asn	Lys 80
Asn	Arg	Asp	Glu	Leu 85	Asn	Glý	Phe	Phe	Asn 90	Lys	Leu	Ile	Arg	Asn 95	Val
Ile	Ala	Leu	Arg 100	Asp	Gln	Gln	Ala	Ala 105	Glu	Glu	Arg	Arg	Arg 110	Asp	Phe
Leu	Gln	Met 115	Val	Leu	Asp	Ala	Arg 120	His	Ser	Ala	Ser	Pro 125	Met	Gly	Val
Gln	Asp 130	Phe	Asp	Ile	Val	Arg 135	Asp	Val	Phe	Ser	Ser 140	Thr	Gly	Cys	Lys
Pro 145	Asn	Pro	Ser	Arg	Gln 150	His	Gln	Pro	Ser	Pro 155	Met	Ala	Arg	Pro	Leu 160
Thr	Val	Asp	Glu	Ile 165	Val	Gly	Gln	Ala	Phe 170	Ile	Phe	Leu	Ile	Ala 175	Gly
Tyr	Glu	Ile	Ile 180	Thr	Asn	Thr	Leu	Ser 185	Phe	Ala	Thr	Tyr	Leu 190	Leu	Ala
Thr	Asn	Pro 195	Asp	Cys	Gln	Glu	Lys 200	Leu	Leu	Arg	Glu	Val 205	Asp	Val	Phe
Lys	Glu 210	Lys	His	Met	Ala	Pro 215	Glu	Phe	Cys	Ser	Leu 220	Glu	Glu	Gly	Leu
Pro 225	Tyr	Leu	Asp	Met	Val 230	Ile	Ala	Glu	Thr	Leu 235	Arg	Met	Tyr	Pro	Pro 240
Ala	Phe	Arg	Phe	Thr 245	Arg	Glu	Ala	Ala	Gln 250	Asp	Cys	Glu	Val	Leu 255	Gly
Gln	Arg	Ile	Pro 260	Ala	Gly	Ala	Val	Leu 265	Glu	Met	Ala	Val	Gly 270	Ala	Leu
His	His	Asp 275	Pro	Glu	His	Trp	Pro 280	Ser	Pro	Glu	Thr	Phe 285	Asn	Pro	Glu
Arg	Phe 290	Thr	Ala	Glu	Ala	Arg 295	Gln	Gln	His	Arg	Pro 300	Phe	Thr	Tyr	Leu
Pro 305	Phe	Gly	Ala	Gly	Pro 310	Arg	Ser	Cys	Leu	Gly 315	Val	Arg	Leu	Gly	Leu 320
Leu	Glu	Val	Lys	Leu 325	Thr	Leu	Leu	His	Val 330	Leu	His	Lys	Phe	Arg 335	Phe

4211

Gln Ala Cys Pro Glu Thr Gln Val Pro Leu Gln Leu Glu Ser Lys Ser 340 345 350

Ala Leu Gly Pro Lys Asn Gly Val Tyr Ile Lys Ile Val Ser Arg 355 360 365

<210> 4636

<211> 198

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4636

Val Val Cys Gln Ser Arg Arg Arg Arg Arg Arg Xaa Arg Arg Arg Arg 1 5 10 15

Ser Thr Val Ile Arg Pro Pro Arg Arg Gly Val Gly Gly Leu Arg Gly 20 25 30

Thr Phe Phe Phe Arg Leu Thr Ala Gly Gln Leu Arg Ser Met Ser
35 40 45

Thr Pro Ala Arg Arg Arg Leu Met Arg Asp Phe Lys Arg Leu Gln Glu 50 55 60

Asp Pro Pro Val Gly Val Ser Gly Ala Pro Ser Glu Asn Asn Ile Met 65 70 75 80

Gln Trp Asn Ala Val Ile Phe Gly Pro Glu Gly Thr Pro Phe Glu Asp
85 90 95

Gly Thr Phe Lys Leu Val Ile Glu Phe Ser Glu Glu Tyr Pro Asn Lys 100 105 110

Pro Pro Thr Val Arg Phe Leu Ser Lys Met Phe His Pro Asn Val Tyr 115 120 125

Ala Asp Gly Ser Ile Cys Leu Asp Ile Leu Gln Asn Arg Trp Ser Pro 130 135 140

Thr Tyr Asp Val Ser Ser Ile Leu Thr Ser Ile Gln Ser Leu Leu Asp 145 150 155 160

Glu Pro Asn Pro Asn Ser Pro Ala Asn Ser Gln Ala Ala Gln Leu Tyr

4212

165 170 175 Gln Glu Asn Lys Arg Glu Tyr Glu Lys Arg Val Ser Ala Ile Val Glu 180 185 Gln Ser Trp Asn Asp Ser 195 <210> 4637 <211> 69 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (29) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (39) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4637 Leu Phe Phe Met Val Ser Asn Met Tyr Asp Gln Cys Ser His Cys Phe 10 Lys Met Tyr Arg Val Asn Ile Asn Thr Ser Tyr Ala Xaa Lys Lys 20 Lys Lys Gly Gly Arg Ser Xaa Gly Ser Lys Leu Thr Tyr Ala Cys Met 40 Arg Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala 55 60 Val Val Leu Gln Arg 65 <210> 4638 <211> 77 <212> PRT <213> Homo sapiens

Leu Tyr Cys Phe Ser Ser Val Leu Glu Lys Lys Ile Asn Pro Ala Ile

10

5

<400> 4638

4213

Thr Phe Trp Asn Cys Leu Asp Phe Ser Ala Val Gln Ala Ile Ser Asn 20 25 30

Ile Val Leu Cys Arg Glu Cys His Cys Ser Phe Glu Cys Ile His Val
35 40 45

Trp Val Leu Ile Ile Val Tyr Phe Leu Trp Gly Trp Lys Arg Lys Thr 50 55 60

Ile Gln Ala Glu Lys Ser Ile Leu Lys Asp Ala Phe Leu 65 70 75

<210> 4639

<211> 617

<212> PRT

<213> Homo sapiens

<400> 4639

Gly Thr Arg Glu Cys Pro Leu Cys Leu Val Arg Leu Pro Pro Glu Arg 1 5 10 15

Ala Pro Arg Leu Leu Ser Cys Pro His Arg Ser Cys Arg Asp Cys Leu 20 25 30

Arg His Tyr Leu Arg Leu Glu Ile Ser Glu Ser Arg Val Pro Ile Ser 35 40 45

Cys Pro Glu Cys Ser Glu Arg Leu Asn Pro His Asp Ile Arg Leu Leu 50 60

Leu Ala Asp Pro Pro Leu Met His Lys Tyr Glu Glu Phe Met Leu Arg 65 70 75 80

Arg Tyr Leu Ala Ser Asp Pro Asp Cys Arg Trp Cys Pro Ala Pro Asp 85 90 95

Cys Gly Tyr Ala Val Ile Ala Tyr Gly Cys Ala Ser Cys Pro Lys Leu 100 105 110

Thr Cys Glu Arg Glu Gly Cys Gln Thr Glu Phe Cys Tyr His Cys Lys 115 120 125

Gln Ile Trp His Pro Asn Gln Thr Cys Asp Met Ala Arg Gln Gln Arg 130 135 140

Ala Gln Thr Leu Arg Val Arg Thr Lys His Thr Ser Gly Leu Ser Tyr 145 150 155 160

Gly	Gln	Glu	Ser	Gly 165	Pro	Asp	Asp	Ile	Lys 170	Pro	Суз	Pro	Arg	Cys 175	Ser
Ala	Tyr	Ile	Ile 180	Lys	Met	Asn	Asp	Gly 185	Ser	Cys	Asn	His	Met 190	Thr	Cys
Ala	Val	Cys 195	Gly	Cys	Glu	Phe	Cys 200	Trp	Leu	Cys	Met	Lys 205	Glu	Ile	Ser
Asp	Leu 210	His	Tyr	Leu	Ser	Pro 215	Ser	Gly	Cys	Thr	Phe 220	Trp	Gly	Lys	Lys
Pro 225	Trp	Ser	Arg	Lys	Lys 230	Lys	Ile	Leu	Trp	Gln 235	Leu	Gly	Thr	Leu	Ile 240
Gly	Ala	Pro	Val	Gly 245	Ile	Ser	Leu	Ile	Ala 250	Gly	Ile	Ala	Ile	Pro 255	Ala
Met	Val	Ile	Gly 260	Ile	Pro	Val	Tyr	Val 265	Gly	Arg	Lys	Ile	His 270	Ser	Arg
Tyr	Glu	Gly 275	Arg	Lys	Thr	Ser	Lys 280	His	Lys	Arg	Asn	Leu 285	Ala	Ile	Thr
Gly	Gly 290	Val	Thr	Leu	Ser	Val 295	Ile	Ala	Ser	Pro	Val 300	Ile	Ala	Ala	Val
Ser 305	Val	Gly	Ile	Gly	Val 310	Pro	Ile	Met	Leu	Ala 315	Tyr	Val	Tyr	Gly	Val 320
Val	Pro	Ile	Ser	Leu 325	Cys	Arg	Gly	Gly	Gly 330	Cys	Gly	Val	Ser	Thr 335	Ala
Așn	Gly	Lys	Gly 340	Val	Lys	Ile	Glu	Phe 345	Asp	Glu	Asp	Asp	Gly 350	Pro	Ile
Thr	Val	Ala 355	Asp	Ala	Trp	Arg	Ala 360	Leu	Lys	Asn	Pro	Ser 365	Ile	Gly	Glu
Ser	Ser 370	Ile	Glu	Gly	Leu	Thr 375	Ser	Val	Leu	Ser	Thr 380	Ser	Gly	Ser	Pro
Thr 385	Asp	Gly	Leu	Ser	Val 390	Met	Gln	Gly	Pro	Tyr 395	Ser	Glu	Thr	Ala	Ser 400
Phe	Ala	Ala	Leu	Ser 405	Gly	Gly	Thr	Leu	Ser 410		Gly	Ile	Leu	Ser 415	Ser
Gly	Lys	Gly	Lys 420	Tyr	Ser	Arg	Leu	Glu 425		Gln	Ala	Asp	Val 430	Gln	Lys

PCT/US00/26524 WO 01/22920

4215

Glu Ile Phe Pro Lys Asp Thr Ala Ser Leu Gly Ala Ile Ser Asp Asn 440 Ala Ser Thr Arg Ala Met Ala Gly Ser Ile Ile Ser Ser Tyr Asn Pro 450 455 Gln Asp Arg Glu Cys Asn Asn Met Glu Ile Gln Val Asp Ile Glu Ala 465 470 475 Lys Pro Ser His Tyr Gln Leu Val Ser Gly Ser Ser Thr Glu Asp Ser 490 Leu His Val His Ala Gln Met Ala Glu Asn Glu Glu Glu Gly Ser Gly 505 500 Gly Gly Gly Ser Glu Glu Asp Pro Pro Cys Arg His Gln Ser Cys Glu 515 520 Gln Lys Asp Cys Leu Ala Ser Lys Pro Trp Asp Ile Ser Leu Ala Gln 535 Pro Glu Ser Ile Arg Ser Asp Leu Glu Ser Ser Asp Ala Gln Ser Asp 555 550 Asp Val Pro Asp Ile Thr Ser Asp Glu Cys Gly Ser Pro Arg Ser His 565 570 Thr Ala Ala Cys Pro Ser Thr Pro Arg Ala Gln Gly Ala Pro Ser Pro

580 585

Ser Ala His Met Asn Leu Ser Ala Leu Ala Glu Gly Gln Thr Val Leu 600 605

Lys Pro Glu Gly Glu Ala Arg Val 610 615

<210> 4640

<211> 155

<212> PRT

<213> Homo sapiens

<400> 4640

Arg Trp Arg Gly Ser Met Ser Gly Ser Met Ala Thr Ala Glu Ala Ser 10

Gly Ser Asp Gly Lys Gly Gln Glu Val Glu Thr Ser Val Thr Tyr Tyr 25

Arg Leu Glu Glu Val Ala Lys Arg Asn Ser Leu Lys Glu Leu Trp Leu

4216

35 40 45 Val Ile His Gly Arg Val Tyr Asp Val Thr Arg Phe Leu Asn Glu His 55 Pro Gly Glu Glu Val Leu Leu Glu Gln Ala Gly Val Asp Ala Ser 70 75 Glu Ser Phe Glu Asp Val Gly His Ser Ser Asp Ala Arg Glu Met Leu Lys Gln Tyr Tyr Ile Gly Asp Ile His Pro Ser Asp Leu Lys Pro Glu 105 Ser Gly Ser Lys Asp Pro Ser Lys Asn Asp Thr Cys Lys Ser Cys Trp 120 Ala Tyr Trp Ile Leu Pro Ile Ile Gly Ala Val Leu Leu Gly Phe Leu 130 135 Tyr Arg Tyr Tyr Thr Ser Glu Ser Lys Ser Ser 145 155 150 <210> 4641 <211> 46 <212> PRT <213> Homo sapiens <400> 4641 Ser Gln Thr Pro His Tyr Ser Ser Leu Glu Leu Leu Ile Lys Glu Asn 5 15 Trp Lys Tyr Ile Cys Pro Cys Leu Asn Phe Ile Ala Leu Ile Cys Val 20 25 Ile Ser Leu Leu Thr Gly Arg Gly Thr Ser Phe Pro Tyr 35 40

	.> SI														
	?> (3 }> Xa		quals	s any	of of	the	natu	ıral]	ly o	ccuri	ing	L-ar	nino	ació	ls
<400)> 46	542													
			Asn	Arg 5	Leu	Phe	Ala	Gly	Leu 10	Leu	Glu	Glu	Gln	Arg 15	Gln
Arg	Ser	Glu	Asp 20	Ser	Met	Tyr	Thr	Ala 25	Ile	Pro	Gln	Ser	Gly 30	Ser	Pro
Phe	Pro	Gly 35	Ser	Val	Gln	Asp	Pro 40	Gly	Leu	His	Val	Trp 45	Arg	Val	Glu
Lys	Leu 50	Lys	Pro	Val	Pro	Val 55	Ala	Gln	Glu	Asn	Gln 60	Gly	Val	Phe	Phe
Ser 65	Gly	Asp	Ser	Tyr	Leu 70	Val	Leu	His	Asn	Gly 75	Pro	Glu	Glu	Val	Ser 80
His	Leu	His	Leu	Asn 85	Thr	Leu	Leu	Gly	Glu 90	Arg	Pro	Val	Gln	His 95	Arg
Glu	Val	Xaa	Gly 100	Asn	Glu	Ser	Asp	Leu 105	Phe	Met	Ser	Tyr	Phe 110	Pro	Arg
Gly	Leu	Lys 115	Tyr	Gln	Glu	Gly	Gly 120	Val	Glu	Ser	Ala	Phe 125	His	Lys	Thr
Ser	Thr 130	Gly	Ala	Pro	Ala	Ala 135	Ile	Lys	Lys	Leu	Tyr 140	Gln	Val	Lys	Gly
Lys 145	Lys	Asn	Ile	Arg	Ala 150	Thr	Glu	Arg	Ala	Leu 155	Asn	Trp	Asp	Ser	Phe
Asn	Thr	Gly	Asp	Cys 165	Phe	Ile	Leu	Asp	Leu 170	Gly	Gln	Asn	Ile	Phe 175	Ala
Trp	Cys	Gly	Gly 180	Lys	Ser	Asn	Ile	Leu 185	Glu	Arg	Asn	Lys	Ala 190	Arg	Asp
Leu	Ala	Leu 195	Ala	Ile	Arg	Asp	Ser 200	Glu	Arg	Gln	Gly	Lys 205	Ala	Gln	Val
Glu	Ile 210	Val	Thr	Asp	Gly	Glu 215		Pro	Ala	Glu	Met 220		Gln	Val	Leu
Gly 225	Pro	Lys	Pro	Ala	Leu 230	Lys	Glu	Gly	Asn	Pro 235	Glu	Glu	Asp	Leu	Thr 240

4218

Ala Asp Lys Ala Asn Ala Gln Ala Ala Ala Leu Tyr Lys Val Ser Asp 245 250 Ala Thr Gly Gln Met Asn Leu Thr Lys Val Ala Asp Ser Ser Pro Phe 260 265 Ala Leu Glu Leu Leu Ile Ser Asp Asp Cys Phe Val Leu Asp Asn Gly 280 Leu Cys Gly Lys Ile Tyr Ile Trp Lys Gly Arg Lys Ala Asn Glu Lys 295 300 Glu Arg Gln Ala Ala Leu Gln Val Ala Glu Gly Phe Ile Ser Arg Met 310 315 305 Gln Tyr Ala Pro Asn Thr Gln Val Glu Ile Leu Pro Gln Gly Xaa Glu 325 330 Ser Pro Ile Phe Lys Gln Phe Phe Lys Asp Trp Lys 340 345 <210> 4643 <211> 389 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (376) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4643 Phe Gln Gly Lys Ile Asp Ala Ala Tyr Phe Glu Thr Ser Lys Tyr Leu 10 Leu Asp Val Leu Asn Lys Lys Tyr Ser Leu Leu Asp His Met Gln Ala 25 20 Met Arg Arg Tyr Leu Leu Gly Gln Gly Asp Phe Ile Arg His Leu 35 Met Asp Leu Leu Lys Pro Glu Leu Val Arg Pro Ala Thr Thr Leu Tyr

Ala Gln Phe Asp Ser Pro Glu Ile Leu Arg Arg Leu Asp Val Arg Leu

Gln His Asn Leu Thr Gly Ile Leu Glu Thr Ala Val Arg Ala Thr Asn

75

55

Leu Glu Val Ser Pro Gly Asp Thr Gly Trp Asp Val Phe Ser Leu Asp Tyr His Val Asp Gly Pro Ile Ala Thr Val Phe Thr Arg Glu Cys Met Ser His Tyr Leu Arg Val Phe Asn Phe Leu Trp Arg Ala Lys Arg Met Glu Tyr Ile Leu Thr Asp Ile Arg Lys Gly His Met Cys Asn Ala Lys Leu Leu Arg Asn Met Pro Glu Phe Ser Gly Val Leu His Gln Cys His Ile Leu Ala Ser Glu Met Val His Phe Ile His Gln Met Gln Tyr Tyr Ile Thr Phe Glu Val Leu Glu Cys Ser Trp Asp Glu Leu Trp Asn Lys Val Gln Gln Ala Gln Asp Leu Asp His Ile Ile Ala Ala His Glu Val Phe Leu Asp Thr Ile Ile Ser Arg Cys Leu Leu Asp Ser Asp Ser Arg Ala Leu Leu Asn Gln Leu Arg Ala Val Phe Asp Gln Ile Ile Glu Leu Gln Asn Ala Gln Asp Ala Ile Tyr Arg Ala Ala Leu Glu Glu Leu Gln Arg Arg Leu Gln Phe Glu Glu Lys Lys Gln Arg Glu Ile Glu Gly Gln Trp Gly Val Thr Ala Ala Glu Glu Glu Glu Glu Asn Lys Arg Ile Gly Glu Phe Lys Glu Ser Ile Pro Lys Met Cys Ser Gln Leu Arg Ile Leu Thr His Phe Tyr Gln Gly Ile Val Gln Phe Leu Val Leu Leu Thr Thr Ser Ser Asp Glu Ser Leu Arg Phe Leu Ser Phe Arg Leu Asp Phe Asn Glu His Tyr Lys Ala Arg Glu Pro Arg Leu Arg Cys Val Ser

PCT/US00/26524 WO 01/22920

4220

365 355 360 Gly Tyr Gln Gly Ala Ala Gln Xaa Pro His Val Lys Leu Ala Val Leu 370 375 380 Pro Gly Ser Cys Gly 385 <210> 4644 <211> 40 <212> PRT <213> Homo sapiens <400> 4644 Phe Cys Pro Ser Arg Leu Cys Phe Leu Pro Phe Leu Cys Ser Arg Ala 10 Ala Ile Ser Arg Asp Pro Phe Tyr Glu Met Leu Ala Ala Arg Lys Lys 25 Lys Val Ser Ser Thr Lys Arg His 35 <210> 4645 <211> 353 <212> PRT <213> Homo sapiens <400> 4645 Arg Lys Gln Cys Gln Asp Ser Lys Asp Ser Asn His Leu Pro Lys Met 10 Ser Leu Ser Ala Phe Thr Leu Phe Leu Ala Leu Ile Gly Gly Thr Ser 20 Gly Gln Tyr Tyr Asp Tyr Asp Phe Pro Leu Ser Ile Tyr Gly Gln Ser 35 40 Ser Pro Asn Cys Ala Pro Glu Cys Asn Cys Pro Glu Ser Tyr Pro Ser 55

Ala Met Tyr Cys Asp Glu Leu Lys Leu Lys Ser Val Pro Met Val Pro

Pro Gly Ile Lys Tyr Leu Tyr Leu Arg Asn Asn Gln Ile Asp His Ile

75

90

70

4221

							_	_					_		_
Asp	Glu	Lys	Ala 100	Phe	Glu	Asn	Val	Thr 105	Asp	Leu	GIn	Trp	110	Ile	Leu
Asp	His	Asn 115	Leu	Leu	Glu	Asn	Ser 120	Lys	Ile	Lys	Gly	Arg 125	Val	Phe	Ser
Lys	Leu 130	Lys	Gln	Leu	Lys	Lys 135	Leu	His	Ile	Asn	His 140	Asn	Asn	Leu	Thr
Glu 145	Ser	Val	Gly	Pro	Leu 150	Pro	Lys	Ser	Leu	Glu 155	Asp	Leu	Gln	Leu	Thr 160
His	Asn	Lys	Ile	Thr 165	Lys	Leu	Gly	Ser	Phe 170	Glu	Gly	Leu	Val	Asn 175	Leu
Thr	Phe	Ile	His 180	Leu	Gln	His	Asn	Arg 185	Leu	Lys	Glu	Asp	Ala 190	Val	Ser
Ala	Ala	Phe 195	Lys	Gly	Leu	Lys	Ser 200	Leu	Glu	Tyr	Leu	Asp 205	Leu	Ser	Phe
Asn	Gln 210	Ile	Ala	Arg	Leu	Pro 215	Ser	G1y	Leu	Pro	Val 220	Ser	Leu	Leu	Thr
Leu 225	Tyr	Leu	Asp	Asn	Asn 230	Lys	Ile	Ser	Asn	Ile 235	Pro	Asp	Glu	Tyr	Phe 240
Lys	Arg	Phe	Asn	Ala 245	Leu	Gln	Tyr	Leu	Arg 250	Leu	Ser	His	Asn	Glu 255	Leu
Ala	Asp	Ser	Gly 260	Ile	Pro	Gly	Asn	Ser 265	Phe	Asn	Val	Ser	Ser 270	Leu	Val
Glu	Leu	Asp 275	Leu	Ser	Tyr	Asn	Lys 280	Leu	Lys	Asn	Ile	Pro 285	Thr	Val	Asn
Glu	Asn 290	Leu	Glu	Asn	Tyr	Tyr 295	Leu	Glu	Val	Asn	Gln 300	Leu	Glu	Lys	Phe
Asp 305	Ile	Lys	Ser	Phe	Cys 310	Lys	Ile	Leu	Gly	Pro 315	Leu	Ser	Tyr	Ser	Lys 320
Ile	Lys	His	Leu	Arg 325	Leu	Asp	Gly	Asn	Arg 330	Ile	Ser	Glu	Thr	Ser 335	Leu
Pro	Pro	Asp	Met 340	Tyr	Glu	Cys	Leu	Arg 345	Val	Ala	Asn	Glu	Val 350	Thr	Leu

Asn

4222

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<210> 4646
<211> 54
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4646
Glu Glu Gln Lys Gly Glu Ile Asn Gly Lys Thr Lys Asn Thr Gln Ile
Cys Gly Phe Gly Xaa Asn Glu Thr Arg Phe Ile Tyr Leu Lys Lys Cys
                                 25
Trp Cys Ser Asn Thr Lys His Tyr Phe His Xaa Glu Lys Ile Thr Tyr
                            40
Leu Leu Pro Ser Val Leu
     50
<210> 4647
<211> 38
<212> PRT
<213> Homo sapiens
<400> 4647
Asn Met Tyr Ser Gly Arg Leu Gln Trp Leu Thr Pro Val Ile Pro Ala
                  5
Leu Trp Gln Ala Glu Met Gly Gly Ser Phe Glu Val Arg Ser Leu Arg
             20
                                 25
Pro Ala Trp Pro Thr Trp
         35
<210> 4648
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<210> 4648 <211> 515

<212> PRT <213> Homo sapiens															
)> 46 Glu	548 Trp	Pro	Lys 5	Ser	Leu	Arg	Ile	Pro 10	Glu	Gly	Pro	Ile	Asp 15	Gln
Gly	Pro	Ala	Ile 20	Gly	Arg	Val	Arg	Val 25	Leu	Glu	Glu	Gln	Leu 30	Val	Lys
Ala	Lys	Glu 35	Gln	Ile	Glu	Asn	Tyr 40	Lys	Lys	Gln	Thr	Arg 45	Asn	Gly	Leu
Gly	Lys 50	Asp	His	Glu	Ile	Leu 55	Arg	Arg	Arg	Ile	Glu 60	Asn	Gly	Ala	Lys
Glu 65	Leu	Trp	Phe	Phe	Leu 70	Gln	Ser	Glu	Leu	Lys 75	Lys	Leu	Lys	Asn	Leu 80
Glu	Gly	Asn	Glu	Leu 85	Gln	Arg	His	Ala	Asp 90	Glu	Phe	Leu	Leu	Asp 95	Leu
Gly	His	His	Glu 100	Arg	Ser	Ile	Met	Thr 105	Asp	Leu	Tyr	Tyr	Leu 110	Ser	Gln
Thr	Asp	Gly 115	Ala	Gly	Asp	Trp	Arg 120	Glu	Lys	Glu	Ala	Lys 125	Asp	Leu	Thr
Glu	Leu 130	Val	Gln	Arg	Arg	Ile 135	Thr	Tyr	Leu	Gln	Asn 140	Pro	Lys	Asp	Cys
Ser 145	Lys	Ala	Lys	Lys	Leu 150	Val	Cys	Asn	Ile	Asn 155	Lys	Gly	Суз	Gly	Tyr 160
Gly	Cys	Gln	Leu	His 165	His	Val	Val	Tyr	Cys 170	Phe	Met	Ile	Ala	Tyr 175	Gly
Thr	Gln	Arg	Thr 180	Leu	Ile	Leu	Glu	Ser 185	Gln	Asn	Trp	Arg	Туг 190	Ala	Thr
Gly	Gly	Trp 195	Glu	Thr	Val	Phe	Arg 200	Pro	Val	Ser	Glu	Thr 205	Cys	Thr	Asp
Arg	Ser 210	Gly	Ile	Ser	Thr	Gly 215	His	Trp	Ser	Gly	Glu 220	Val	Lys	Asp	Lys
Asn	Va1	Gln	Val	Val	Glu	Leu	Pro	Ile	Val	Asp	Ser	Leu	His	Pro	Arg

Pro Pro Tyr Leu Pro Leu Ala Val Pro Glu Asp Leu Ala Asp Arg Leu

Val	Arg	Val	His 260	Gly	Asp	Pro	Ala	Val 265	Trp	Trp	Val	Ser	Gln 270	Phe	Val
Lys	Tyr	Leu 275	Ile	Arg	Pro	Gln	Pro 280	Trp	Leu	Glu	Lys	Glu 285	Ile	Glu	Glu
Ala	Thr 290	Lys	Lys	Leu	Gly	Phe 295	Lys	His	Pro	Val	11e 300	Gly	Val	His	Val
Arg 305	Arg	Thr	Asp	Lys	Val 310	Gly	Thr	Glu	Ala	Ala 315	Phe	His	Pro	Ile	Glu 320
Glu	Tyr	Met	Val	His 325	Val	Glu	Glu	His	Phe 330	Gln	Leu	Leu	Ala	Arg 335	Arg
Met	Gln	Val	Asp 340	Lys	Lys	Arg	Val	Tyr 345	Leu	Ala	Thr	Asp	Asp 350	Pro	Ser
Leu	Leu	Lys 355	Glu	Ala	Lys	Thr	Lys 360	Tyr	Pro	Asn	Tyr	Glu 365	Phe	Ile	Ser
Asp	Asn 370	Ser	Ile	Ser	Trp	Ser 375	Ala	Gly	Leu	His	Asn 380	Arg	Tyr	Thr	Glu
Asn 385	Ser	Leu	Arg	Gly	Val 390	Ile	Leu	Asp	Ile	His 395	Phe	Leu	Ser	Gln	Ala 400
Asp	Phe	Leu	Val	Cys 405	Thr	Phe	Ser	Ser	Gln 410	Val	Cys	Arg	Val	Ala 415	Tyr
Glu	Ile	Met	Gln 420	Thr	Leu	His	Pro	Asp 425	Ala	Ser	Ala	Asn	Phe 430	His	Ser
Leu	Asp	Asp 435	Ile	Tyr	Tyr	Phe	Gly 440	Gly	Gln	Asn	Ala	His 445	Asn	Gln	Ile
Ala	Ile 450	Tyr	Ala	His	Gln	Pro 455	Arg	Thr	Ala	Asp	Glu 460	Ile	Pro	Met	Glu
Pro 465	Gly	Asp	Ile	Ile	Gly 470	Val	Ala	Gly	Asn	His 475	Trp	Asp	Gly	Tyr	Ser 480
Lys	Gly	Val	Asn	Arg 485	Lys	Leu	Gly	Arg	Thr 490	Gly	Leu	Tyr	Pro	Ser 495	Tyr
Lys	Val	Arg	Glu 500	Lys	Ile	Glu	Thr	Val 505	Lys	Tyr	Pro	Thr	Туг 510	Pro	Glu
Ala	Glu	Lys 515													

4225

<210> 4649 <211> 47 <212> PRT <213> Homo sapiens <400> 4649 Ala Ala Gly Val Pro Val Phe Asp Phe Ser Val Asn Met Leu Phe Val 10 His Ile Ser Thr Trp Trp Arg Pro Tyr Ser Leu Phe His Leu Pro Asn 25 Asn Gly Lys Asn Ile Lys Val Asn Gln Cys Ala Leu Gly Ile Gln 40 <210> 4650 <211> 38 <212> PRT <213> Homo sapiens <400> 4650 Cys Ile Val Ile Ile Tyr Asp Arg Ser Ser His Phe Phe Leu Leu Lys 10 Lys Ile Thr Leu Ser Pro Val Gly Asn Gly Ile Leu Trp Ala Phe Lys 25 Arg Lys Phe Tyr Glu Thr 35 <210> 4651 <211> 171 <212> PRT <213> Homo sapiens <400> 4651 Gly Thr Ser Tyr Gly Leu Pro Arg Tyr Arg Trp Leu Thr His Ala Trp 5 Asn Phe Phe Gln Arg Glu Phe Lys Cys Cys Gly Val Val Tyr Phe Thr 20 Asp Trp Leu Glu Met Thr Glu Met Asp Trp Pro Pro Asp Ser Cys Cys

40

4226

Val Arg Glu Phe Pro Gly Cys Ser Lys Gln Ala His Gln Glu Asp Leu 50 55 Ser Asp Leu Tyr Gln Glu Gly Cys Gly Lys Lys Met Tyr Ser Phe Leu 70 75 Arg Gly Thr Lys Gln Leu Gln Val Leu Arg Phe Leu Gly Ile Ser Ile 90 85 Gly Val Thr Gln Ile Leu Ala Met Ile Leu Thr Ile Thr Leu Leu Trp 105 110 Ala Leu Tyr Tyr Asp Arg Glu Pro Gly Thr Asp Gln Met Met Ser 115 Leu Lys Asn Asp Asn Ser Gln His Leu Ser Cys Pro Ser Val Glu Leu 140 135 Leu Lys Pro Ser Leu Ser Arg Ile Phe Glu His Thr Ser Met Ala Asn 150 155 Ser Phe Asn Thr His Phe Glu Met Glu Glu Leu 170 165

<210> 4652

<211> 200

<212> PRT

<213> Homo sapiens

<400> 4652

Ser Leu Gly Glu Leu Pro Thr Asp Pro Ser Ser Asp Glu Pro Val Phe
1 5 10 15

His Ile Ser His Ile Asp Arg Val Tyr Thr Leu Arg Thr Asp Asn Ile 20 25 30

Asn Glu Arg Thr Thr Trp Val Gln Lys Ile Lys Ala Ala Ser Glu Gln 35 40 45

Tyr Ile Asp Thr Glu Lys Lys Lys Arg Glu Lys Ala Tyr Gln Ala Arg
50 55 60

Ser Gln Lys Thr Ser Gly Ile Gly Arg Leu Met Val His Val Ile Glu 65 70 75 80

Ala Thr Glu Leu Lys Ala Cys Lys Pro Asn Gly Lys Ser Asn Pro Tyr 85 90 95

4227

Cys Glu Ile Ser Met Gly Ser Gln Ser Tyr Thr Thr Arg Thr Ile Gln
100 105 110

Asp Thr Leu Asn Pro Lys Trp Asn Phe Asn Cys Gln Phe Phe Ile Lys
115 120 125

Asp Leu Tyr Gln Asp Val Leu Cys Leu Thr Leu Phe Asp Arg Asp Gln 130 135 140

Phe Ser Pro Asp Asp Phe Leu Gly Arg Thr Glu Ile Pro Val Ala Lys 145 150 155 160

Ile Arg Thr Glu Gln Glu Ser Lys Gly Pro Met Thr Arg Arg Leu Leu 165 170 175

Leu His Glu Val Pro Thr Gly Glu Val Trp Val Arg Phe Asp Leu Gln
180 185 190

Leu Phe Glu Gln Lys Thr Leu Leu 195 200

<210> 4653

<211> 91

<212> PRT

<213> Homo sapiens

<400> 4653

Val Ser Pro Gly Gly Gln Gln Gly Leu His Phe Ser Glu Gly Leu Glu
1 5 10 15

Gly Leu Val Glu Leu Leu Gly Gln Arg Ser Arg Ser Arg Glu Asn Ile 20 25 30

Arg Pro Ser Asp Leu Ser Ser Ala Leu Arg Ala Leu Pro Glu Ser Ser 35 40 45

Ser Arg Gly Leu Gln Ser Leu Arg Lys Pro Ser Gln Arg Ala Ala Pro 50 55 60

Thr Ser Gln Ala Val Cys Thr Ser Pro Cys Tyr Ala Leu Leu Cys Asn 65 70 75 80

<210> 4654

<211> 44

4228

<212> PRT

<213> Homo sapiens

<400> 4654

Ser Gln His Phe Ala Arg Pro Arg Arg Val Asp His Leu Arg Ser Gly
1 5 10 15

Val Arg Asp Gln Pro Asp Gln His Gly Glu Thr Pro Ser Leu Leu Lys
20 25 30

Ile Gln Lys Leu Ala Trp His Gly Gly Ala Cys Leu 35 40

<210> 4655

<211> 76

<212> PRT

<213> Homo sapiens

<400> 4655

Thr Leu Arg Val Arg Thr Gly Ser Tyr Ser Ser Leu Cys Ala Phe Leu 1 5 10 15

Met Leu Gln Arg Ile Tyr His Leu Met Glu Glu Asn Ile Cys Lys Leu 20 25 30

Ala Pro Tyr Gln Ala Pro Ser Thr Tyr Ser Thr His Leu Asn Phe Glu 35 40 45

Cys Arg Ile Phe Lys Leu Gln Pro His Ile Leu Arg Ser Arg Lys Asn 50 55 60

Leu Met Gly Ile Asn Leu His Pro Leu Ala Leu Pro 65 70 75

<210> 4656

<211> 284

<212> PRT

<213> Homo sapiens

<400> 4656

Ala His Ala Ser Thr His Ala Ser Gly Ser Val Ser Pro Cys Arg Gln
1 5 10 15

Leu His Phe Pro Leu Phe Leu Phe Pro Phe Pro Ser Arg Pro Arg Ala 20 25 30

Pro Pro Ser Leu Val Gly Trp Ser Arg Ser Pro Cys Ala Phe Ser Leu

4229

		35					40					45			
Leu	Gly 50	Ser	Cys	Val	Arg	Ala 55	Cys	Pro	Ala	Met	Asn 60	Glu	Glu	Tyr	Asp
Val 65	Ile	Val	Leu	Gly	Thr 70	Gly	Leu	Thr	Glu	Cys 75	Ile	Leu	Ser	Gly	Ile 80
Met	Ser	Val	Asn	Gly 85	Lys	Lys	Val	Leu	His 90	Met	Asp	Arg	Asn	Pro 95	Tyr
Tyr	Gly	Gly	Glu 100	Ser	Ala	Ser	Ile	Thr 105	Pro	Leu	Glu	Asp	Leu 110	Tyr	Lys
Arg	Phe	Lys 115	Ile	Pro	Gly	Ser	Pro 120	Pro	Glu	Ser	Met	Gly 125	Arg	Gly	Arg
Asp	Trp 130	Asn	Val	Asp	Leu	Ile 135	Pro	Lys	Phe	Leu	Met 140	Ala	Asn	Gly	Gln
Leu 145	Val	Lys	Met	Leu	Leu 150	Tyr	Thr	Glu	Val	Thr 155	Arg	Tyr	Leu	Asp	Phe 160
Lys	Val	Thr	Glu	Gly 165	Ser	Phe	Val	Tyr	Lys 170	Gly	Gly	Lys	Ile	Tyr 175	Lys
Val	Pro	Ser	Thr 180	Glu	Ala	Glu	Ala	Leu 185	Ala	Ser	Ser	Leu	Met 190	Gly	Leu
Phe	Glu	Lys 195	Arg	Arg	Phe	Arg	Lys 200	Phe	Leu	Val	Tyr	Val 205	Ala	Asn	Phe
Asp	Glu 210	Lys	Asp	Pro	Arg	Thr 215	Phe	Glu	Gly	Ile	Asp 220	Pro	Lys	Lys	Thr
Thr 225	Met	Arg	Asp	Val	Tyr 230	Lys	Lys	Phe	Asp	Leu 235		Gln	Asp	Val	11e
Asp	Phe	Thr	Gly	His 245	Ala	Leu	Ala	Leu	Туг 250	Arg	Thr	Asp	Asp	Туг 255	Leu
Asp	Gln	Pro	Cys 260	Tyr	Glu	Thr	Ile	Asn 265	Arg	Ile	Lys	Leu	Tyr 270	Tyr	Суя
Gly	Lys	Thr 275	Thr	Val	Leu	Ile	Lys 280	Asp	Leu	His	Ser				

<210> 4657 <211> 125

4230

<212> PRT <213> Homo sapiens

<400> 4657

Asp Gly Val Leu Leu Pro Arg Leu Glu Trp Ser Ala Trp Cys Asp 1 5 10 15

Leu Gly Ser Leu Gln Thr Pro Pro Pro Gly Phe Lys Arg Phe Ser Trp
20 25 30

Pro Ser Leu Leu Ser Ser Trp Asp Tyr Arg Cys Val Pro Pro Cys Pro 35 40 45

Ala Asn Phe Cys Val Phe Ser Arg Asp Gly Val Ser Pro Cys Trp Pro 50 55 60

Ala Gly Leu Glu Leu Leu Thr Ser Gly Tyr Met Pro Thr Ser Thr Ser 65 70 75 80

Gln Ser Ala Gly Ile Thr Gly Met Ser His Cys Ala Gln Pro Gly Ile 85 90 95

Asp Asn Leu Tyr Ser Asp Asn Leu Leu Trp Leu Phe Asn Ile Pro Gln
100 105 110

Gly Ala Leu Lys Ser Lys His Ser Arg Val Cys Ser Phe 115 120 125

<210> 4658

<211> 85

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4658

Trp Arg Gly Val Gly Xaa Ala Arg Lys Lys Glu Asn Ser Pro Leu Gly
1 5 10 15

Lys Lys Glu Glu His Trp Ile Leu Thr Phe Trp Ile Leu Thr Leu 20 25 30

Gly Cys Lys Thr Tyr Leu Pro Leu Ser Arg Leu Pro Ser Pro Ser Thr 35 40 45

Leu Asn Val Leu Leu Ser Phe Ser Val Ser Ala Pro Ser Ser Pro Phe

4231

50 55 60

Pro Leu Pro Pro Pro His Thr Leu His Pro Leu Cys Pro Gly Pro Ser 65 70 75 80

Glu Gly His Cys Arg

<210> 4659

<211> 43

<212> PRT

<213> Homo sapiens

<400> 4659

Val Asp Pro Arg Val Arg Pro Arg Val Arg Pro Arg 1 5 10 15

Lys Lys Lys Lys Lys Lys Lys Gly Gly 35

<210> 4660

<211> 86

<212> PRT

<213> Homo sapiens

<400> 4660

Asp Ile Thr Ala Lys Leu Gly Ile Gly Glu Met Ala Glu Thr Asp Pro 1 5 10 15

Lys Thr Val Gln Asp Leu Thr Ser Val Val Gln Thr Leu Leu Gln Gln 20 25 30

Met Gln Asp Lys Phe Gln Thr Met Ser Asp Gln Ile Ile Gly Arg Ile 35 40 45

Asp Asp Met Ser Ser Arg Ile Asp Asp Leu Glu Lys Asn Ile Ala Asp 50 55 60

Leu Met Thr Gln Ala Gly Val Glu Glu Leu Glu Ser Glu Asn Lys Ile 65 70 75 80

Pro Ala Thr Gln Lys Ser

4232

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<210> 4661
<211> 111
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4661
Arg Arg Glu Gly Cys Arg Arg Pro Arg Gly Ser Arg Ala Gly Gly Ala
                                     10
Ala Ala Ala Met Gln Glu Ile Ile Ala Ser Val Asp His Ile Lys
                                 25
Phe Asp Leu Glu Ile Ala Val Glu Gln Gln Leu Gly Ala Gln Pro Leu
         35
                             40
                                                 45
Pro Xaa Gln Thr Gln Pro Pro Ala Lys Xaa Xaa Thr Pro Gln Val Ile
Gly Val Met Gln Ser Gln Asn Ser Ser Ala Gly Asn Arg Gly Pro Arg
                     70
                                         75
Pro Leu Glu Gln Val Thr Cys Tyr Lys Cys Gly Glu Lys Gly His Tyr
Ala Asn Arg Cys Thr Lys Gly His Leu Ala Phe Leu Ser Gly Gln
            100
                                105
                                                    110
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<210> 4662 <211> 69

<212> PRT

<213> Homo sapiens

4233

<400> 4662 Ser His Phe Val Cys Cys Val Lys Gln Lys Ala Leu Met Lys Lys Gln 5 Lys Val Met Tyr Val Tyr Glu Lys Ile Asn Cys Thr Ile Ser Phe Gln 25 Tyr Val Leu Tyr Ile Leu Val Leu Phe Thr Phe Ser Ser Leu Leu 40 Arg Gly Cys Glu Leu Tyr Ser Phe Gln Leu Val Thr His Ile Arg Glu 55 Glu Ile Arg Glu Tyr 65 <210> 4663 <211> 212 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (172) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (205) <223> Xaa equals any of the naturally occurring L-amino acids Gly Ala Val Ala Ala Ala Arg Ala Ile Arg Leu Thr His Leu Ala Pro 10 Val Pro Gln Asp Gln Ser Gly Ala Gly Arg Glu Gly Glu Glu Ala Arg 20 Ala Arg Arg Ala Arg Val Arg Ile Gly Ala Gly Arg Ser Arg Asp Leu 40 Gly Ser Gly Arg Gly Gly Cys Glu Arg Ala Ala Asn Arg Ala Gly Gly 50 Gly Arg Ala His His Gly Gly Glu Thr Arg Asp Gln Leu Thr Val Tyr 70 75 65

Leu Gly Lys Arg Asp Phe Val Asp His Leu Asp Lys Val Asp Pro Val

90

4234

Asp Gly Val Val Leu Val Asp Pro Asp Tyr Leu Lys Asp Arg Lys Val 105 110 100 Phe Val Thr Leu Thr Cys Ala Phe Arg Tyr Gly Arg Glu Asp Leu Asp 120 125 115 Val Leu Gly Leu Ser Phe Arg Lys Asp Leu Phe Ile Ala Thr Tyr Gln 135 Ala Phe Pro Pro Val Pro Asn Pro Pro Arg Pro Pro Thr Arg Leu Gln 150 155 Asp Arg Leu Leu Arg Lys Leu Gly Gln His Ala Xaa Pro Phe Phe 165 170 Thr Ile Pro Gln Asn Leu Pro Cys Ser Val Thr Leu Gln Pro Gly Pro 185 180 Glu Asp Thr Gly Lys Ala Cys Gly Val Asp Phe Glu Xaa Glu Pro Ser 200 Val Leu Asn His 210 <210> 4664 <211> 137 <212> PRT <213> Homo sapiens <400> 4664 Ala Ala Asn Lys Lys Asn Glu Ala Arg Leu Arg Ile Val Lys Thr Leu Glu Asp Ile Asp Leu Gly Pro Thr Glu Lys Cys Val Arg Val Asn Ser 30 20 25 Val Ser Ser Gly Leu Ala Glu Glu Asp Leu Glu Thr Leu Leu Gln Ser 35 Arg Val Leu Pro Ser Ser Leu Met Leu Pro Lys Val Glu Ser Pro Glu

Glu Ile Gln Trp Phe Ala Asp Lys Phe Ser Phe His Leu Lys Gly Arg

Lys Leu Glu Gln Pro Met Asn Leu Ile Pro Phe Val Glu Thr Ala Met

70

85

75

4235

Gly Leu Leu Asn Phe Lys Ala Val Cys Glu Glu Thr Leu Lys Val Gly
100 105 110

Pro Gln Val Gly Leu Phe Leu Asp Ala Val Val Phe Gly Arg Arg Arg 115 120 125

Leu Ser Ser Gln His Arg Cys Asn Lys 130 135

<210> 4665

<211> 197

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (168)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (172)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4665

Val Ile Cys Met Trp Gln Gly Cys Ala Val Glu Arg Pro Val Gly Arg
1 5 10 15

Met Thr Ser Gln Thr Pro Leu Pro Gln Ser Pro Arg Pro Arg Pro 20 25 30

Thr Met Ser Thr Val Val Glu Leu Asn Val Gly Gly Glu Phe His Thr 35 40 45

Thr Thr Leu Gly Thr Leu Arg Lys Phe Pro Gly Ser Lys Leu Ala Glu 50 60

Met Phe Ser Ser Leu Ala Lys Ala Ser Thr Asp Ala Glu Gly Arg Phe 65 70 75 80

Phe Ile Asp Arg Pro Ser Thr Tyr Phe Arg Pro Ile Leu Asp Tyr Leu 85 90 95

Ala Gln Phe Tyr Glu Ile Lys Pro Leu Val Lys Leu Leu Glu Asp Met 115 120 125

4236

Pro Gln Ile Phe Gly Glu Gln Val Ser Arg Lys Gln Phe Leu Leu Gln 130 135 140

Val Pro Gly Tyr Ser Glu Asn Leu Glu Leu Met Val Arg Leu Ala Arg 145 150 155 160

Ala Glu Ala Ile Thr Ala Arg Xaa Ser Ser Val Xaa Val Cys Leu Val 165 170 175

Glu Thr Glu Glu Gln Asp Ala Tyr Tyr Ser Glu Val Leu Cys Phe Ser 180 185 190

Cys Arg Ile Arg Arg 195

<210> 4666

<211> 293

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4666

Gln Ser Lys Met Gly Ala Tyr His Thr Ile Glu Leu Glu Pro Asn Arg 1 5 10 15

Gln Phe Thr Leu Ala Lys Lys Gln Trp Asp Ser Val Val Leu Glu Arg 20 25 30

Ile Glu Gln Ala Cys Xaa Pro Ala Trp Ser Ala Asp Val Ala Ala Val
35 40 45

Val Met Gln Glu Gly Leu Ala His Ile Cys Leu Val Thr Pro Ser Met 50 55 60

Thr Leu Thr Arg Ala Lys Val Glu Val Asn Ile Pro Arg Lys Arg Lys 65 70 75 80

Gly Asn Cys Ser Gln His Asp Arg Ala Leu Glu Arg Phe Tyr Glu Gln 85 90 95

Val Val Gln Ala Ile Gln Arg His Ile His Phe Asp Val Val Lys Cys 100 105 110

Ile Leu Val Ala Ser Pro Gly Phe Val Arg Glu Gln Phe Cys Asp Tyr 115 120 125

4237

Met Phe Gln Gln Ala Val Lys Thr Asp Asn Lys Leu Leu Glu Asn 130 135 Arg Ser Lys Phe Leu Gln Val His Ala Ser Ser Gly His Lys Tyr Ser 150 155 Leu Lys Glu Ala Leu Cys Asp Pro Thr Val Ala Ser Arg Leu Ser Asp 170 165 Thr Lys Ala Ala Gly Glu Val Lys Ala Leu Asp Asp Phe Tyr Lys Met 185 Leu Gln His Glu Pro Asp Arg Ala Phe Tyr Gly Leu Lys Gln Val Glu 200 195 Lys Ala Asn Glu Ala Met Ala Ile Asp Thr Leu Leu Ile Ser Asp Glu 220 215 Leu Phe Arg His Gln Asp Val Ala Thr Arg Ser Arg Tyr Val Arg Leu 230 235 Val Asp Ser Val Lys Glu Asn Ala Gly Thr Val Arg Ile Phe Ser Ser 245 250 Leu His Val Ser Gly Glu Gln Leu Ser Gln Leu Thr Gly Val Ala Ala 260 265 Ile Leu Arg Phe Pro Val Pro Glu Leu Ser Asp Gln Glu Gly Asp Ser 275 280 285 Ser Ser Glu Glu Asp 290 <210> 4667 <211> 55 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

4238

<400> 4667

Pro Ala Ser Thr Ala Trp Val Pro Pro Pro Gly Xaa Asp Pro Gly Pro

1 5 10 15

Arg Ser Leu Ala Pro Gly Trp Asp Pro Ala Pro Gly Ser Tyr Xaa Arg
20 25 30

Gly Ser Gln Leu Arg Arg Pro Ala Gln Pro Asp Ser Leu Lys Ala Gln 35 40 45

Arg Ala Gly Ser Arg Pro Pro 50 55

<210> 4668

<211> 136

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4668

Val Asp Pro Arg Val Xaa Pro Arg Ser Gly Gly Glu Lys Pro Gly Gly
1 5 10 15

Leu Gly Ala Pro Ala Gly Ile Gly Ser Arg Leu Gly Cys Glu Arg Phe
20 25 30

Ser Arg Ser Arg Glu Ile Leu Gln Ala Ile Thr Met Ser Thr Asp Thr 35 40 45

Gly Val Ser Leu Pro Ser Tyr Glu Glu Asp Gln Gly Ser Lys Leu Ile 50 60

Arg Lys Ala Lys Glu Ala Pro Phe Val Pro Val Gly Ile Ala Gly Phe 65 70 75 80

Ala Ala Ile Val Ala Tyr Gly Leu Tyr Lys Leu Lys Ser Arg Gly Asn 85 90 95

Thr Lys Met Ser Ile His Leu Ile His Met Arg Val Ala Ala Gln Gly
100 105 110

Phe Val Val Gly Ala Met Thr Val Gly Met Gly Tyr Ser Met Tyr Arg 115 120 125

Glu Phe Trp Ala Lys Pro Lys Pro

4239

130 135

<210> 4669

<211> 122

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (76)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4669

Thr Ala Ser Trp Ser Pro Ala Pro Val Pro Ser Ser Leu Glu Arg Leu
1 5 10 15

Phe Ser Pro Asp Gly Thr Phe Pro Ser Arg Arg Phe Leu Gly Leu Trp
20 25 30

Leu Phe Phe Ser Cys Ala Arg Leu Ile Gly His Leu Leu Ala Ser Ile
35 40 45

Ser Val Val Leu Leu Pro His Phe Leu Phe Cys Cys Phe Ser Val Leu 50 55 60

Ser Lys Tyr Leu Leu Cys Ser Trp Leu Pro Phe Xaa Arg Gln Val Phe 65 70 75 80

Ser Phe Pro Leu Ala Leu Leu Leu Ile Trp Leu Leu Pro Thr Lys Ala 85 90 95

Cys Ser Val Arg Ile Ser Trp Phe Ser Thr Cys Gln Asn Leu Leu Gln 100 105 110

Pro Gln Phe Leu Gly Leu Asn Leu Tyr Val

<210> 4670

<211> 439

<212> PRT

<213> Homo sapiens

<400> 4670

Gly Gly Arg Gly Gln Glu Pro Gln Met Arg Ala Phe Leu Ala Cys Met

1 5 10 15

Arg Ser Asp Thr Pro Ala Met Leu Asn Pro Ala Asn Val Pro Thr His

Leu Met Val Leu Cys Cys Val Leu Arg Tyr Met Val Gln Trp Pro Gly Ala Arg Ile Leu Arg Arg Gln Glu Leu Asp Ala Phe Leu Ala Gln Ala Leu Ser Pro Lys Leu Tyr Glu Pro Asp Gln Leu Gln Glu Leu Lys Ile Glu Asn Leu Asp Pro Arg Gly Ile Gln Leu Ser Ala Leu Phe Met Ser Gly Val Asp Met Ala Leu Phe Ala Asn Asp Ala Cys Gly Gln Pro Ile Pro Trp Glu His Cys Cys Pro Trp Met Tyr Phe Asp Gly Lys Leu Phe Gln Ser Lys Leu Leu Lys Ala Ser Arg Glu Lys Thr Pro Leu Ile Asp Leu Cys Asp Gly Gln Ala Asp Gln Ala Ala Lys Val Glu Lys Met Arg Gln Ser Val Leu Glu Gly Leu Ser Phe Ser Arg Gln Ser His Thr Leu Pro Phe Pro Pro Pro Pro Ala Leu Pro Phe Tyr Pro Ala Ser Ala Tyr Pro Arg His Phe Gly Pro Val Pro Pro Ser Gln Gly Arg Gly Arg Gly . Phe Ala Gly Val Cys Gly Phe Gly Gly Pro Tyr Gly Glu Thr Val Ala Thr Gly Pro Tyr Arg Ala Phe Arg Val Ala Ala Ser Gly His Cys Gly Ala Phe Ser Gly Ser Asp Ser Ser Arg Thr Ser Lys Ser Gln Gly Gly Val Gln Pro Ile Pro Ser Gln Gly Gly Lys Leu Glu Ile Ala Gly Thr Val Val Gly His Trp Ala Gly Ser Arg Arg Gly Arg Gly Arg Gly Pro Phe Pro Leu Gln Val Val Ser Val Gly Gly Pro Ala Arg Gly

4241

290 295 300 Arg Pro Arg Gly Val Ile Ser Thr Pro Val Ile Arg Thr Phe Gly Arg 310 315 Gly Gly Arg Tyr Tyr Gly Arg Gly Tyr Lys Asn Gln Ala Ala Ile Gln 325 330 Gly Arg Pro Pro Tyr Ala Ala Ser Ala Glu Glu Val Ala Lys Glu Leu 345 Lys Ser Lys Ser Gly Glu Ser Lys Ser Ser Ala Met Ser Ser Asp Gly 360 355 Ser Leu Ala Glu Asn Gly Val Met Ala Glu Glu Lys Pro Ala Pro Gln 375 Met Asn Gly Ser Thr Gly Asp Ala Arg Ala Pro Ser His Ser Glu Ser 385 390 395 Ala Leu Asn Asn Asp Ser Lys Thr Cys Asn Thr Asn Pro His Leu Asn 405 410 415 Ala Leu Ser Thr Asp Ser Ala Cys Arg Arg Glu Ala Ala Leu Glu Ala 420 425 430 Ala Val Leu Asn Lys Glu Glu 435 <210> 4671 <211> 102 <212> PRT <213> Homo sapiens <400> 4671 Asn Arg Lys Val Cys Arg Lys Ile Ala Ala His Gly Leu Cys Arg Lys Glu Ser Leu Gln Asn Leu Leu His Ser Ser Arg Lys Leu Ser Leu Gln 25 Val Leu Asn Phe Val His Ser Phe Gln Glu Gly Ala Ser Ile Leu Asp 35 40 Ile His Thr Glu Pro Ser Phe Ser Ser Leu Leu Ser Gln Ser Ser Tyr 50 55 Ala Asp Met Gly Val Pro Leu Pro Ala Lys Asn Leu Ile Phe Lys Asp 70 75

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Gly Val Leu Ser Glu Trp Ser Gly Arg Ser Pro Ser Ser Leu Leu Ile
                 85
                                     90
                                                          95
Ala Asn Leu His Leu Gln
           100
<210> 4672
<211> 631
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
<220>
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<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
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	2> (3 3> Xā		quals	any	of.	the	natu	ırall	у ос	ccurr	ing	L-an	nino	ació	ls
<222	l> si 2> (3	357)	mia] (r ans	, of	the	natu	.r=11	W 00	3011X1	cina	Tan	nina	ació	l e
~22.) ~ Ac	ia et	₁ ua i	ο απη	, 01	CITE	nacc	ιιαιι	.y 00	Curi	9	D-an		acic	15
)> 46		Glu	Glu	Glu	Pro	Pro	Ser	Mot	Thr	Gln	Len	Len	Ara	Arc
1	чэр	Giu	Jiu	5	Giu	110	110	DCI	10	1112	0111	Leu	Dea	15	5
Xaa	Xaa	Leu	Ser 20	Cys	His	Arg	Pro	Gly 25	Met	Trp	Ser	Val	His 30	Cys	Arç
Ser	Lys	Glu 35	Xaa	Xaa	Asp	Met	Met 40	Gly	Arg	Asn	Gln	Thr 45	Ala	Val	Arg
Glu	Glu 50	Met	Xaa	Leu	Leu	Ala 55	Asn	Tyr	Leu	Asp	Ser 60	Met	Tyr	Xaa	Met
Leu 65	Asn	Ile	Arg	Ile	Val 70	Leu	Val	Gly	Leu	G1u 75	Ile	Trp	Thr	Asn	80 Gl ⁷
Asn	Leu	Ile	Asn	Ile 85	Val	Gly	Gly	Ala	Gly 90	Asp	Val	Leu	Gly	Asn 95	Xaa
Val	Gln	Trp	Arg 100	Glu	Lys	Phe	Leu	Ile 105	Thr	Arg	Arg	Arg	His 110	Asp	Sei
Ala	Gln	Leu 115	Val	Leu	Lys	Lys	Gly 120	Phe	Gly	Gly	Thr	Ala 125	Gly	Met	Ala
Phe	Val 130	Gly	Thr	Val	Cys	Ser 135	Arg	Ser	His	Ala	Gly 140	Gly	Ile	Asn	Va]
Phe 145	Gly	Gln	Ile	Thr	Val 150	Glu	Thr	Phe	Ala	Ser 155	Ile	Val	Ala	His	Gl: 160
Leu	Gly	His	Asn	Leu 165	Gly	Met	Asn	His	Asp 170	Asp	Gly	Arg	Asp	Cys 175	Sei
Cys	Gly	Ala	Lys 180	Ser	Cys	Ile	Met	Asn 185	Ser	Gly	Ala	Ser	Gly 190	Ser	Arg
Asn	Phe	Ser 195	Ser	Cys	Ser	Ala	Glu 200	Asp	Phe	Glu	Lys	Leu 205	Thr	Leu	Ası
Lys	Gly 210	Gly	Asn	Cys	Leu	Leu 215	Asn	Ile	Pro	Lys	Pro 220	Asp	Glu	Ala	Туз

Ser	Ala	Pro	Ser	Cys	Gly	Asn	Lys	Leu	Val	Asp	Ala	Gly	Glu	Glu	Cys
225					230					235					240
Asp	Cys	Gly	Thr	Pro 245	Lys	Glu	Cys	Glu	Leu 250	Asp	Pro	Суз	Cys	Glu 255	Gly
Ser	Thr	Сув	Lys 260	Leu	Lys	Ser	Phe	Ala 265	Glu	Суѕ	Ala	Tyr	Gly 270	Asp	Cys
Суз	Lys	Asp 275	Cys	Arg	Phe	Leu	Pro 280	Gly	Gly	Thr	Leu	Cys 285	Arg	Gly	Lys
Thr	Ser 290	Glu	Cys	Asp	Val	Pro 295	Glu	Tyr	Cys	Asn	Gly 300	Ser	Ser	Gln	Phe
Суз 305	Gln	Pro	Asp	Val	Phe 310	Ile	Gln	Asn	Gly	Tyr 315	Pro	Cys	Gln	Asn	Asn 320
Lys	Ala	Tyr	Cys	Tyr 325	Asn	Gly	Met	Cys	Gln 330	Tyr	Tyr	Asp	Ala	Gln 335	Cys
Gln	Val	Ile	Phe 340	Xaa	Ser	Lys	Ala	Lys 345	Ala	Ala	Pro	Lys	Asp 350	Cys	Phe
Ile	Glu	Val 355	Asn	Xaa	Lys	Gly	Asp 360	Arg	Phe	Gly	Asn	Cys 365	Gly	Phe	Ser
Gly	Asn 370	Glu	Tyr	Lys	Lys	Cys 375	Ala	Thr	Gly	Asn	Ala 380	Leu	Cys	Gly	Lys
Leu 385	Gln	Cys	Glu	Asn	Val 390	Gln	Glu	Ile	Pro	Val 395	Phe	Gly	Ile	Val	Pro 400
Ala	Ile	Ile	Gln	Thr 405	Pro	Ser	Arg	Gly	Thr 410	Lys	Cys	Trp	Gly	Val 415	Asp
Phe	Gln	Leu	Gly 420	Ser	Asp	Val	Pro	Asp 425	Pro	Gly	Met	Val	Asn 430	Glu	Gly
Thr	Lys	Cys 435	Gly	Ala	Gly	Lys	Ile 440	Cys	Arg	Asn	Phe	Gln 445	Cys	Val	Asp
Ala	Ser 450	Val	Leu	Asn	Tyr	Asp 455	Cys	Asp	Val	Gln	Lys 460	Lys	Cys	His	Gly
His 465	Gly	Val	Cys	Asn	Ser 470	Asn	Lys	Asn	Cys	His 475	Cys	Glu	Asn	Gly	Trp 480
Ala	Pro	Pro	Asn	Cys 485	Glu	Thr	Lys	Gly	Tyr 490	Gly	Gly	Ser	Val	Asp 495	Ser

4245

Gly Pro Thr Tyr Asn Glu Met Asn Thr Ala Leu Arg Asp Gly Leu Leu 505 500 Val Phe Phe Leu Ile Val Pro Leu Ile Val Cys Ala Ile Phe Ile 520 515 Phe Ile Lys Arg Asp Gln Leu Trp Arg Ser Tyr Phe Arg Lys Lys Arg 530 535 Ser Gln Thr Tyr Glu Ser Asp Gly Lys Asn Gln Ala Asn Pro Ser Arg 550 Gln Pro Gly Ser Val Pro Arg His Val Ser Pro Val Thr Pro Pro Arg 570 565 Glu Val Pro Ile Tyr Ala Asn Arg Phe Ala Val Pro Thr Tyr Ala Ala 580 585 Lys Gln Pro Gln Gln Phe Pro Ser Arg Pro Pro Pro Pro Gln Pro Lys 600 595 Val Ser Ser Gln Gly Asn Leu Ile Pro Ala Arg Pro Ala Pro Ala Pro 615 620 Pro Leu Tyr Ser Ser Leu Thr 625 630 <210> 4673 <211> 98 <212> PRT <213> Homo sapiens <400> 4673 Met Ile Ala Thr Tyr Cys Phe Cys Cys Cys Phe Phe Ser Asp Ser Phe 10 Leu Ser Leu Asp Leu Phe Val Leu Ser Cys Gly Glu Trp Cys Phe Ser 20 25 Tyr Cys Val Ala Ala Arg Ile Arg Ile Gln Phe Leu Phe Leu Leu Pro 35 Tyr Ser Tyr Cys Val Ala Thr Arg Ile Arg Ile Gln Phe Leu Phe Ile 50 55 60 Leu Pro Cys Ser Glu Gly Ser Leu Ile Ser Thr Lys Lys Leu Leu Glu 70 75

Ala Glu Lys Val Asn Val Ile Val His Ser Ala Phe Lys Lys Leu Phe

4246

85 90 95

Gln Leu

<210> 4674

<211> 35

<212> PRT

<213> Homo sapiens

<400> 4674

Asn Lys Ser Trp Ser Ser Thr Ala Val Ala Ala Ala Leu Glu Leu Val 1 5 10 15

Asp Pro Pro Gly Cys Arg Asn Ser Ala Arg Gly Val Met Asn Arg Asn 20 25 30

Phe Gln Met

<210> 4675

<211> 487

<212> PRT

<213> Homo sapiens

<400> 4675

Phe Ser Glu Val Gln Ile Ala Leu Asn Glu Ala Lys Leu Ser Glu Glu 1 5 10 15

Lys Val Lys Ser Glu Cys His Arg Val Gln Glu Glu Asn Ala Arg Leu 20 25 30

Lys Lys Lys Glu Gln Leu Gln Gln Glu Ile Glu Asp Trp Ser Lys 35 40 45

Leu His Ala Glu Leu Ser Glu Gln Ile Lys Ser Phe Glu Lys Ser Gln 50 55 60

Lys Asp Leu Glu Val Ala Leu Thr His Lys Asp Asp Asn Ile Asn Ala 65 70 75 80

Leu Thr Asn Cys Ile Thr Gln Leu Asn Leu Leu Glu Cys Glu Ser Glu 85 90 95

Ser Glu Gly Gln Asn Lys Gly Gly Asn Asp Ser Asp Glu Leu Ala Asn 100 105 110

Gly	Glu	Val 115	Gly	Gly	Asp	Arg	Asn 120	Glu	Lys	Met	Lys	Asn 125	Gln	Ile	Lys
Gln	Met 130	Met	Asp	Val	Ser	Arg 135	Thr	Gln	Thr	Ala	Ile 140	Ser	Val	Val	Glu
Glu 145	Asp	Leu	Lys	Leu	Leu 150	Gln	Leu	Lys	Leu	Arg 155	Ala	Ser	Val	Ser	Thr 160
Lys	Cys	Asn	Leu	Glu 165	Asp	Gln	Val	Lys	Lys 170	Leu	Glu	Asp	Asp	Arg 175	Asn
Ser	Leu	Gln	Ala 180	Ala	Lys	Ala	Gly	Leu 185	Glu	Asp	Glu	Cys	Lys 190	Thr	Leu
Arg	Gln	Lys 195	Val	Glu	Ile	Leu	Asn 200	Glu	Leu	Tyr	Gln	Gln 205	Lys	Glu	Met
Ala	Leu 210	Gln	Lys	Lys	Leu	Ser 215	Gln	Glu	Glu	Tyr	Glu 220	Arg	Gln	Glu	Arg
Glu 225	His	Arg	Leu	Ser	Ala 230	Ala	Asp	Glu	Lys	Ala 235	Val	Ser	Ala	Ala	Glu 240
Glu	Val	Lys	Thr	Tyr 245	Lys	Arg	Arg	Ile	Glu 250	Glu	Met	Glu	Asp	Glu 255	Leu
Gln	Lys	Thr	Glu 260	Arg	Ser	Phe	Lys	Asn 265	Gln	Ile	Ala	Thr	His 270	Glu	Lys
Lys	Ala	His 275	Glu	Asn	Trp	Leu	Lys 280	Ala	Arg	Ala	Ala	Glu 285	Arg	Ala	Ile
Ala	Glu 290	Glu	Lys	Arg	Glu	Ala 295	Ala	Asn	Leu	Arg	His 300	Lys	Leu	Leu	Glu
Leu 305	Thr	Gln	Lys	Met	Ala 310	Met	Leu	Gln	Glu	Glu 315	Pro	Val	Ile	Val	Lys 320
Pro	Met	Pro	Gly	Lys 325	Pro	Asn	Thr	Gln	Asn 330	Pro	Pro	Arg	Arg	Gly 335	Pro
Leu	Ser	Gln	Asn 340	Gly	Ser	Phe	Gly	Pro 345	Ser	Pro	Val	Ser	Gly 350	Gly	Glu
Cys	Ser	Pro 355	Pro	Leu	Thr	Val	Glu 360		Pro	Val	Arg	Pro 365	Leu	Ser	Ala
Thr	Leu 370	Asn	Arg	Arg	Asp	Met 375	Pro	Arg	Ser	Glu	Phe 380	Gly	Ser	Val	Asp

4248

Gly Pro Leu Pro His Pro Arg Trp Ser Ala Glu Ala Ser Gly Lys Pro 395 390 Ser Pro Ser Asp Pro Gly Ser Gly Thr Ala Thr Met Met Asn Ser Ser 410 405 Ser Arg Gly Ser Ser Pro Thr Arg Val Leu Asp Glu Gly Lys Val Asn 420 425 Met Ala Pro Lys Gly Pro Pro Pro Phe Pro Gly Val Pro Leu Met Ser 440 Thr Pro Met Gly Gly Pro Val Pro Pro Pro Ile Arg Tyr Gly Pro Pro 455 Pro Gln Leu Cys Gly Pro Phe Gly Pro Arg His Phe Leu His Pro Leu 475 465 470 Ala Leu Val Cys Val His His 485 <210> 4676 <211> 74 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (23) <223> Xaa equals any of the naturally occurring L-amino acids Ala Phe Asp Glu Ala Ile Ala Glu Leu Asp Thr Leu Asn Glu Glu Ser 5 Tyr Lys Asp Ser Thr Leu Xaa Met Gln Leu Leu Arg Asp Asn Leu Thr 20 25 Val Ser Thr Thr Ser Thr Gly Phe Ile Val Ser Phe Leu Phe Thr Tyr 40 Leu Ile Ile His Cys Tyr Leu Gln Glu Gly Ile Cys Thr Ile Lys Cys

55

Ser Tyr Ser Phe Lys Leu Leu Asn Leu Leu

70

60

50

4249

<210> 4677 <211> 414 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (391) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4677 Val Ile Gly Glu Phe Arg Asp Cys Ile Ser Ser Arg Glu Phe Leu Gln 10 Pro Ser Ser Lys Ala Ser Leu Glu Ser Thr Ser Asp Leu Gly Ala Ser 25 Gly Lys His Gly Gly Asn Val Ser Leu Asp Val Leu Pro Val Lys Gly 40 Pro Gln Gly Ser Pro Leu Leu Ser Arg Ala Ala Arg Pro Pro Asp Gln 50 55 Leu Ala Ser Glu Glu Pro Trp Thr Val Leu Pro Glu His Leu Ile Leu Val Ala Pro Ser Pro Cys Asp Met Ala Lys Thr Gly Arg Phe Gln Ile 85 90 Val Asn Asn Ser Val Arg Leu Leu Arg Phe Glu Leu Cys Trp Pro Ala 105 110 1.00 His Cys Leu Thr Val Thr Pro Gln His Gly Cys Val Ala Pro Glu Ser 115 120 Lys Leu Gln Ile Leu Val Ser Pro Asn Ser Ser Leu Ser Thr Lys Gln 135 Ser Met Phe Pro Trp Ser Gly Leu Ile Tyr Ile His Cys Asp Asp Gly 150 155 Gln Lys Lys Ile Val Lys Val Gln Ile Arg Glu Asp Leu Thr Gln Val 165 Glu Leu Leu Thr Arg Leu Thr Ser Lys Pro Phe Gly Ile Leu Ser Pro 180 185 190 Val Ser Glu Pro Ser Val Ser His Leu Val Lys Pro Met Thr Lys Pro 200 Pro Ser Thr Lys Val Glu Ile Arg Asn Lys Ser Ile Thr Phe Pro Thr

PCT/US00/26524 WO 01/22920

4250

215 220 210 Thr Glu Pro Gly Glu Thr Ser Glu Ser Cys Leu Glu Leu Glu Asn His 225 230 235 Gly Thr Thr Asp Val Lys Trp His Leu Ser Ser Leu Ala Pro Pro Tyr 250 245 Val Lys Gly Val Asp Glu Ser Gly Asp Val Phe Arg Ala Thr Tyr Ala 260 265 Ala Phe Arg Cys Ser Pro Ile Ser Gly Leu Leu Glu Ser His Gly Ile 280 Gln Lys Val Ser Ile Thr Phe Leu Pro Arg Gly Arg Gly Asp Tyr Ala 295 Gln Phe Trp Asp Val Glu Cys His Pro Leu Lys Glu Pro His Met Lys 310 315 305 His Thr Leu Arg Phe Gln Leu Ser Gly Gln Ser Ile Glu Ala Glu Asn 325 330 Glu Pro Glu Asn Ala Cys Leu Ser Thr Asp Ser Leu Ile Lys Ile Asp 345 340 His Leu Val Lys Pro Arg Gln Ala Val Ser Glu Ala Ser Ala Arg 360 Ile Pro Asp Arg Gln Leu Asp Val Thr Ala Arg Gly Val Tyr Ala Pro 370 375 Glu Asp Val Tyr Arg Ser Xaa Arg Leu Val Trp Gly Asn His Gly His 395 385 390 Leu Lys Ala Ile Cys Glu Ile Ile Leu Leu His Thr His 405 410 <210> 4678

<211> 85

<212> PRT

<213> Homo sapiens

<400> 4678

Leu Tyr Ile Phe Phe Gly Lys Lys Tyr Leu Lys Thr Ser Ala Tyr Lys 10

Asp Ser Gln Lys Cys Gln Arg Phe Ser Arg Lys Phe Ile Leu Tyr Ile 20 25

4251

Ser Lys Met Ile Tyr Gln Cys Tyr Leu Pro Lys Glu Ile Ile Leu Phe 35 40 45

Phe Pro Phe Gly Glu Ile Leu Ser Ser Asn Met Arg Ile Arg Ser Leu 50 55 60

Asp Ser Ile Ser Thr Tyr Thr Ile Lys Leu Asn Leu Glu Pro Glu Leu 65 70 75 80

Gly Cys Ser Val Pro 85

<210> 4679

<211> 112

<212> PRT

<213> Homo sapiens

<400> 4679

Arg Ala Pro Cys Val Ser Leu Ser Ser Gln Val His Ser Gly Leu Leu 1 5 10 15

Leu His Pro Leu Leu Arg Gly Cys Pro Ala Gly Arg Gly Pro Leu Leu 20 25 30

Ser Gln Leu Gln Ser Ser Pro Gly His Leu Gln Ala Phe Val Gly Leu 35 40 45

Ser Gln Thr Trp Arg Glu Pro Gly Ala Ala Gly Ser Pro Phe His Leu 50 55 60

Ser Ser Ser Phe Thr Pro Gly Gly Gly Ser Ala Leu Val Val Ser Pro 65 70 75 80

Leu Gln Gly Ala His Leu His Val Phe Phe Trp Gly Glu Tyr Val Ala 85 90 95

Lys Leu Thr Asn Leu Gln Thr Pro Glu Ile Ala Ala Trp Ser Arg Ala
100 105 110

<210> 4680

<211> 561

<212> PRT

<213> Homo sapiens

4252

<220> <221> SITE <222> (112) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (169) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (171) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4680 Asn Cys His Phe Lys Leu Ser Ser His Tyr Leu Asp Gly Tyr Thr Ser 5 Pro Gly Phe Lys Met Leu Glu Ala Tyr Asn Leu Thr Glu Lys Asn Phe 20 25 Ala Ser Val Gln Gly Val Ser Leu Glu Ser Gly Ser Phe Pro Ser Tyr 40 Ser Ala Tyr Arg Ile Gln Lys Asn Ala Phe Val Asn Gln Pro Thr Ala 55 Asp Leu His Gln Asn Gly Leu Pro Pro Ser Tyr Thr Ile Ile Leu Leu 70 65 Phe Arg Leu Leu Pro Glu Thr Pro Ser Asp Pro Phe Ala Ile Trp Gln 90 Ile Thr Asp Arg Asp Tyr Lys Pro Gln Val Gly Val Ile Ala Asp Xaa 105 Ser Ser Lys Thr Leu Ser Phe Phe Asn Lys Asp Thr Arg Gly Glu Val 115 120 Gln Thr Val Thr Phe Asp Thr Glu Glu Val Lys Thr Leu Phe Tyr Gly 130 135 140 Ser Phe His Lys Val His Ile Val Val Thr Ser Lys Ser Val Lys Ile 145 150 155 Tyr Ile Asp Cys Tyr Glu Ile Ile Xaa Lys Xaa Ile Lys Glu Ala Gly 170 165 Asn Ile Thr Thr Asp Gly Tyr Glu Ile Leu Gly Lys Leu Leu Lys Gly

			180					185					190		
Glu	Arg	Lys 195	Ser	Ala	Ala	Phe	Gln 200	Ile	Gln	Ser	Phe	Asp 205	Ile	Val	Cys
Ser	Pro 210	Val	Trp	Thr	Ser	Arg 215	Asp	Arg	Cys	Сув	Asp 220	Ile	Pro	Ser	Arg
Arg 225	Asp	Glu	Gly	Lys	Cys 230	Pro	Ala	Phe	Pro	Asn 235	Ser	Суз	Thr	Cys	Thr 240
Gln	Asp	Ser	Val	Gly 245	Pro	Pro	Gly	Pro	Pro 250	G1y	Pro	Ala	Gly	Gly 255	Pro
Gly	Ala	Lys	Gly 260	Pro	Arg	Gly	Glu	Arg 265	Gly	Ile	Ser	Gly	Ala 270	Ile	Gly
Pro	Pro	Gly 275	Pro	Arg	G1y	Asp	Ile 280	Gly	Pro	Pro	Gly	Pro 285	Gln	Gly	Pro
Pro	Gly 290	Pro	Gln	Gly	Pro	Asn 295	Gly	Leu	Ser	Ile	Pro 300	Gly	Glu	Gln	Gly
Arg 305	Gln	Gly	Met	Lys	Gly 310	Asp	Ala	Gly	Glu	Pro 315	Gly	Leu	Pro	Gly	Arg 320
Thr	Gly	Thr	Pro	Gly 325	Leu	Pro	Gly	Pro	Pro 330	Gly	Pro	Met	Gly	Pro 335	Pro
Gly	Asp	Arg	Gly 340	Phe	Thr	Gly	Lys	Asp 345	Gly	Ala	Met	Gly	Pro 350	Arg	Gly
Pro	Pro	Gly 355	Pro	Pro	Gly	Ser	Pro 360	Gly	Ser	Pro	Gly	Val 365	Thr	Gly	Pro
Ser	Gly 370	Lys	Pro	Gly	Lys	Pro 375	Gly	Asp	His	Gly	Arg 380	Pro	Gly	Pro	Ser
Gly 385	Leu	Lys	Gly	Glu	Lys 390	Gly	Asp	Arg	Gly	Asp 395	Ile	Ala	Ser	Gln	Asn 400
Met	Met	Arg	Ala	Val 405	Ala	Arg	Gln	Val	Cys 410	Glu	Gln	Leu	Ile	Ser 415	Gly
Gln	Met	Asn	Arg 420	Phe	Asn	Gln	Met	Leu 425	Asn	Gln	Ile	Pro	Asn 430	Asp	Tyr
Gln	Ser	Ser 435	Arg	Asn	Gln	Pro	Gly 440	Pro	Pro	Gly	Pro	Pro 445	Gly	Pro	Pro
Gly	Ser	Ala	Gly	Ala	Arg	Gly	Glu	Pro	Gly	Pro	Gly	Gly	Arg	Pro	Gly

4254

450 455 460 Phe Pro Gly Thr Pro Gly Met Gln Gly Pro Pro Gly Glu Arg Gly Leu 470 475 Pro Gly Glu Lys Gly Glu Arg Gly Thr Gly Ser Ser Gly Pro Arg Gly 485 490 Leu Pro Gly Pro Pro Gly Pro Gln Gly Glu Ser Arg Thr Gly Pro Pro 510 500 505 Gly Ser Thr Gly Ser Arg Gly Pro Pro Gly Pro Pro Gly Arg Pro Gly 515 520 Asn Ser Gly Ile Arg Gly Pro Pro Gly Pro Pro Gly Tyr Cys Asp Ser Ser Gln Cys Ala Ser Ile Pro Tyr Asn Gly Gln Ser Tyr Pro Gly Ser 550 555 Gly <210> 4681 <211> 38 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (31) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4681

Gly Asp Pro Leu Val Leu Glu Arg Pro Pro Pro Arg Trp Ser Xaa Ser 20 25 30

Thr Ser Pro Thr Thr His Leu Ser Leu Val Pro Asn Ser Cys Ser Pro

10

Phe Val Pro Leu Val Arg 35

5

<210> 4682

<211> 309

<212> PRT

<213> Homo sapiens

4255

<400> 4682 Pro Ala Ile Ala Met Ala Arg Gly Lys Ala Lys Glu Glu Gly Ser Trp Lys Lys Phe Ile Trp Asn Ser Glu Lys Lys Glu Phe Leu Gly Arg Thr 25 Gly Ser Trp Phe Lys Ile Leu Leu Phe Tyr Val Ile Phe Tyr Gly 35 40 Cys Leu Ala Gly Ile Phe Ile Gly Thr Ile Gln Val Met Leu Leu Thr Ile Ser Glu Phe Lys Pro Thr Tyr Gln Asp Arg Val Ala Pro Pro Gly 75 70 Leu Thr Gln Ile Pro Gln Ile Gln Lys Thr Glu Ile Ser Phe Arg Pro 85 90 Asn Asp Pro Lys Ser Tyr Glu Ala Tyr Val Leu Asn Ile Val Arg Phe 100 Leu Glu Lys Tyr Lys Asp Ser Ala Gln Arg Asp Asp Met Ile Phe Glu 120 125 Asp Cys Gly Asp Val Pro Ser Glu Pro Lys Glu Arg Gly Asp Phe Asn 135 His Glu Arg Gly Glu Arg Lys Val Cys Arg Phe Lys Leu Glu Trp Leu 145 150 Gly Asn Cys Ser Gly Leu Asn Asp Glu Thr Tyr Gly Tyr Lys Glu Gly 165 170 Lys Pro Cys Ile Ile Ile Lys Leu Asn Arg Val Leu Gly Phe Lys Pro 185 Lys Pro Pro Lys Asn Glu Ser Leu Glu Thr Tyr Pro Val Met Lys Tyr 200 205 Asn Pro Asn Val Leu Pro Val Gln Cys Thr Gly Lys Arg Asp Glu Asp 210 215 Lys Asp Lys Val Gly Asn Val Glu Tyr Phe Gly Leu Gly Asn Ser Pro 225 230 235 Gly Phe Pro Leu Gln Tyr Tyr Pro Tyr Tyr Gly Lys Leu Leu Gln Pro 250 . 245 Lys Tyr Leu Gln Pro Leu Leu Ala Val Gln Phe Thr Asn Leu Thr Met

PCT/US00/26524 WO 01/22920

4256

270 260 265 Asp Thr Glu Ile Arg Ile Glu Cys Lys Ala Tyr Gly Glu Asn Ile Gly 280 Tyr Ser Glu Lys Asp Arg Phe Gln Gly Arg Phe Asp Val Lys Ile Glu 295 Val Lys Ser Asp Ser 305 <210> 4683 <211> 177 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (58) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4683 Cys Phe Gly Phe Val Phe Pro Glu Ala Ala Ile Trp Ser Leu Ser Thr 5 Gly Met Ser Gln Thr Gly Pro Pro Met Ser Met Ala Ala Pro Ala Arg 20 25 Asn Ala Arg Val Ser Leu Pro Gly Leu Arg Val Asp Met Pro Ala Pro 40 45 Cys Gln Pro Pro Val Ala Trp Pro Gly Xaa Pro Glu Pro Val Cys Pro 55 Pro Gln Gly Trp Arg Ser Leu Trp Ala Pro Gly Gly Phe Pro Pro Gly 65 70 75 Asp Ser His Gly Ala Pro Cys Ser Arg Val Val Thr Val Ser Pro Glu 90 Met Thr Glu Thr Arg His Ser Pro Gly Pro Gln Arg Gly Gly Ala Ser 105

Arg Gln Thr Leu Gly Met Glu Leu Trp Cys Gly Leu Ser Cys Met Val 120

Ala Ser Ala Phe Cys Gln His Phe Trp Met Asp Ile Gly Thr Ile Ile

135

130

125

4257

Ser Ile Leu Ile His Gly Asp Phe Lys Thr Thr Ile Lys Leu Ile Gln 145 150 155 160

Ser Pro Leu Thr Leu Thr Asp Val Gly Ile Pro Leu Leu Glu Arg Glu 165 170 175

Leu

<210> 4684

<211> 439

<212> PRT

<213> Homo sapiens

<400> 4684

Ala Arg Asp Glu Met Gly His Asn Phe Gly Met Phe His Asp Asp Tyr
1 5 10 15

Ser Cys Lys Cys Pro Ser Thr Ile Cys Val Met Asp Lys Ala Leu Ser 20 25 30

Phe Tyr Ile Pro Thr Asp Phe Ser Ser Cys Ser Arg Leu Ser Tyr Asp 35 40 45

Lys Phe Phe Glu Asp Lys Leu Ser Asn Cys Leu Phe Asn Ala Pro Leu 50 55 60

Pro Thr Asp Ile Ile Ser Thr Pro Ile Cys Gly Asn Gln Leu Val Glu 65 70 75 80

Met Gly Glu Asp Cys Asp Cys Gly Thr Ser Glu Glu Cys Thr Asn Ile 85 90 95

Cys Cys Asp Ala Lys Thr Cys Lys Ile Lys Ala Thr Phe Gln Cys Ala 100 \$105\$

Leu Gly Glu Cys Cys Glu Lys Cys Gln Phe Lys Lys Ala Gly Met Val 115 120 125

Cys Arg Pro Ala Lys Asp Glu Cys Asp Leu Pro Glu Met Cys Asn Gly 130 135 140

Lys Ser Gly Asn Cys Pro Asp Asp Arg Phe Gln Val Asn Gly Phe Pro 145 150 155 160

Cys His His Gly Lys Gly His Cys Leu Met Gly Thr Cys Pro Thr Leu 165 170 175

Gln Glu Gln Cys Thr Glu Leu Trp Gly Pro Gly Thr Glu Val Ala Asp

Lys Ser Cys Tyr Asn Arg Asn Glu Gly Gly Ser Lys Tyr Gly Tyr Cys Arg Arg Val Asp Asp Thr Leu Ile Pro Cys Lys Ala Asn Asp Thr Met Cys Gly Lys Leu Phe Cys Gln Gly Gly Ser Asp Asn Leu Pro Trp Lys Gly Arg Ile Val Thr Phe Leu Thr Cys Lys Thr Phe Asp Pro Glu Asp Thr Ser Gln Glu Ile Gly Met Val Ala Asn Gly Thr Lys Cys Gly Asp Asn Lys Val Cys Ile Asn Ala Glu Cys Val Asp Ile Glu Lys Ala Tyr Lys Ser Thr Asn Cys Ser Ser Lys Cys Lys Gly His Ala Val Cys Asp His Glu Leu Gln Cys Gln Cys Glu Glu Gly Trp Ile Pro Pro Asp Cys Asp Asp Ser Ser Val Val Phe His Phe Ser Ile Val Val Gly Val Leu Phe Pro Met Ala Val Ile Phe Val Val Val Ala Met Val Ile Arg His Gln Ser Ser Arg Glu Lys Gln Lys Lys Asp Gln Arg Pro Leu Ser Thr Thr Gly Thr Arg Pro His Lys Gln Lys Arg Lys Pro Gln Met Val Lys Ala Val Gln Pro Gln Glu Met Ser Gln Met Lys Pro His Val Tyr Asp Leu Pro Val Glu Gly Asn Glu Pro Pro Ala Ser Phe His Lys Asp Thr Asn Ala Leu Pro Pro Thr Val Phe Lys Asp Asn Pro Met Ser Thr Pro Lys Asp Ser Asn Pro Lys Ala

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<210> 4685
<211> 60
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4685
Ala Gly Xaa Pro Ala Gly Xaa Gly Pro Glu Phe Pro Gly Arg Pro Thr
       5 ,
                                                        15
Arg Pro Asp Asp Cys Asn Ser Pro Cys Tyr Arg Arg Glu Ile Ile Gly
            20
                                25
Ser Cys Leu Leu Thr Leu Cys Val Ala Leu Trp Ser Trp Ile Phe Leu
Arg Phe Lys Lys Asn His Ser Phe Gly Thr Phe Asn
                        55
<210> 4686
<211> 48
<212> PRT
<213> Homo sapiens
<400> 4686
Gly Val Val Tyr Ser Tyr Phe Phe Phe Leu Leu Val Ile Leu Thr Asn
                                    10
Met Ile Pro Leu Leu Glu Ser Leu Ser Leu Pro His Pro Gln Lys Cys
                                25
Leu Leu Phe Met Thr Val Thr Asn Tyr Ser Gly Gln Ile Ala Ser Phe
         35
                            40
                                                45
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4260

<210> 4687 <211> 351 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (30) <223> Xaa equals any of the naturally occurring L-amino acids Gly Gly Ser Gly Glu Phe Trp Arg Lys Arg Arg Val Leu Leu Glu Leu Tyr Arg Pro Cys Phe Ser Gly Pro Arg Lys Val Ala Ser Xaa Ser Ala 25 Ala Ala Ser Thr Leu Ser Glu Pro Pro Arg Arg Thr Gln Glu Ser Arg 40 Thr Arg Thr Arg Ala Leu Gly Leu Pro Thr Leu Pro Met Glu Lys Leu 50 Ala Ala Ser Thr Glu Pro Gln Gly Pro Arg Pro Val Leu Gly Arg Glu 70 75 Ser Val Gln Val Pro Asp Asp Gln Asp Phe Arg Ser Phe Arg Ser Glu 90 Cys Glu Ala Glu Val Gly Trp Asn Leu Thr Tyr Ser Arg Ala Gly Val 100 105 110 Ser Val Trp Val Gln Ala Val Glu Met Asp Arg Thr Leu His Lys Ile 115 120 Lys Cys Arg Met Glu Cys Cys Asp Val Pro Ala Glu Thr Leu Tyr Asp 135 Val Leu His Asp Ile Glu Tyr Arg Lys Lys Trp Asp Ser Asn Val Ile 145 150 155 Glu Thr Phe Asp Ile Ala Arg Leu Thr Val Asn Ala Asp Val Gly Tyr 165 Tyr Ser Trp Arg Cys Pro Lys Pro Leu Lys Asn Arg Asp Val Ile Thr 180 185 190 Leu Arg Ser Trp Leu Pro Met Gly Ala Asp Tyr Ile Ile Met Asn Tyr 200 Ser Val Lys His Pro Lys Tyr Pro Pro Arg Lys Asp Leu Val Arg Ala

4261

215 220 210 Val Ser Ile Gln Thr Gly Tyr Leu Ile Gln Ser Thr Gly Pro Lys Ser 230 235 Cys Val Ile Thr Tyr Leu Ala Gln Val Asp Pro Lys Gly Ser Leu Pro 250 245 Lys Trp Val Val Asn Lys Ser Ser Gln Phe Leu Ala Pro Lys Ala Met 265 260 Lys Lys Met Tyr Lys Ala Cys Leu Lys Tyr Pro Glu Trp Lys Gln Lys 280 His Leu Pro His Phe Lys Pro Trp Leu His Pro Glu Gln Ser Pro Leu 300 295 Pro Ser Leu Ala Leu Ser Glu Leu Ser Val Gln His Ala Asp Ser Leu 305 310 315 Glu Asn Ile Asp Glu Ser Ala Val Ala Glu Ser Arg Glu Glu Arg Met 325 330 Gly Gly Ala Gly Gly Glu Gly Ser Asp Asp Thr Ser Leu Thr 340 345

<210> 4688

<211> 54

<212> PRT

<213> Homo sapiens

<400> 4688

Met Gly Val Tyr Asn Phe Tyr Val Ser Cys Phe Gln Gln Leu Cys Leu 1 5 10 15

Gly Trp Ser Leu Ala Gly Gly Asp Arg Ile Ser Glu Trp His Ile Ile 20 25 30

Ser Ile Leu His Met Ser Lys Leu Arg His Arg Glu Leu Asp Asn Leu 35 40 45

Pro Arg Leu His Arg Leu 50

<210> 4689

<211> 65

<212> PRT

4262

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<213> Homo sapiens
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<400> 4689

Glu Gln Tyr Leu Asp Leu Met Leu Ser Glu Cys Pro Ala Leu Leu Pro 1 5 10 15

Ser Ala Trp Met Ser Glu Cys Phe Tyr Ala Arg Gly Asp Ser Ser Gln 20 25 30

Leu Arg Val Cys Phe Phe Gln Arg Ser Ser Gln Val Ser Phe Ala Lys $35 \hspace{1cm} 40 \hspace{1cm} 45$

Leu Gly His Leu Ala Gln Val Phe Leu Glu Ser Gly Val His Val Thr 50 55 60

Asp 65

<210> 4690

<211> 31

<212> PRT

<213> Homo sapiens

<400> 4690

Leu Leu Leu Ile Ser Tyr Tyr Cys Lys Ala Leu Ser Pro Ala Ser Gly
1 5 10 15

Ser Leu Cys Val Ile Glu Leu Lys Ile Ile Ala Val Tyr Asn Thr \$20\$ \$25\$ 30

<210> 4691

<211> 127

<212> PRT

<213> Homo sapiens

<400> 4691

Lys Val Gln Thr Leu Phe Gly Thr Thr Arg Ser Phe His Leu Ala Lys

1 5 10 15

Thr Ala Asp Pro Gly Ala Arg Ala Gln Gly Ser Pro Gly Cys Gly Glu 20 25 30

Glu Trp Leu Trp His Leu Pro Ile Leu Trp Val Leu Gln Ala Leu Leu 35 40 45

Glu Val Phe Gly Leu Phe Gly Leu Trp Ser Phe Ser Pro Gly Thr Glu 50 60

4263

Val Glu Met Gly Arg Arg Pro Gly Gln Cys Ser Trp Lys Leu Thr Leu 65 70 75 His Phe Ser Ala Pro Val Phe Gln Phe Lys Ser Ala Phe Ser Ser Ala 85 90 Glu Thr Thr Glu Leu Ser Gly Lys Cys Val Val Ala Leu Ala Thr Gly 105 Glu Val Trp Gly Gln Leu Val Ile Arg Lys Gly Met Glu Asp Val 120 <210> 4692 <211> 329 <212> PRT <213> Homo sapiens <400> 4692 Ser Tyr Val His Lys Ser Leu Ser Trp Lys Pro Leu Leu Ser Phe Ile 10 Ser Pro Ser Ile Pro Ile Thr Phe Leu Arg Asn Val Thr Trp Val Met 25 Val Asn Leu Cys Arg His Lys Asp Pro Pro Pro Pro Met Glu Thr Ile 35 40 Gln Glu Ile Leu Pro Ala Leu Cys Val Leu Ile His His Thr Asp Val Asn Ile Leu Val Asp Thr Val Trp Ala Leu Ser Tyr Leu Thr Asp Ala 75 70 Gly Asn Glu Gln Ile Gln Met Val Ile Asp Ser Gly Ile Val Pro His 85 90 Leu Val Pro Leu Leu Ser His Gln Glu Val Lys Val Gln Thr Ala Ala 105 Leu Arg Ala Val Gly Asn Ile Val Thr Gly Thr Asp Glu Gln Thr Gln 120 125 Val Val Leu Asn Cys Asp Ala Leu Ser His Phe Pro Ala Leu Leu Thr 140 135

His Pro Lys Glu Lys Ile Asn Lys Glu Ala Val Trp Phe Leu Ser Asn

150 155

160

4264

Ile Thr Ala Gly Asn Gln Gln Gln Val Gln Ala Val Ile Asp Ala Asn 170 Leu Val Pro Met Ile Ile His Leu Leu Asp Lys Gly Asp Phe Gly Thr 185 180 Gln Lys Glu Ala Ala Trp Ala Ile Ser Asn Leu Thr Ile Ser Gly Arg 195 200 Lys Asp Gln Val Ala Tyr Leu Ile Gln Gln Asn Val Ile Pro Pro Phe Cys Asn Leu Leu Thr Val Lys Asp Ala Gln Val Val Gln Val Val Leu 235 230 Asp Gly Leu Ser Asn Ile Leu Lys Met Ala Glu Asp Glu Ala Glu Thr 245 250 Ile Gly Asn Leu Ile Glu Glu Cys Gly Gly Leu Glu Lys Ile Glu Gln 265 260 Leu Gln Asn His Glu Asn Glu Asp Ile Tyr Lys Leu Ala Tyr Glu Ile 280 Ile Asp Gln Phe Phe Ser Ser Asp Asp Ile Asp Glu Asp Pro Ser Leu 295 300 290 Val Pro Glu Ala Ile Gln Gly Gly Thr Phe Gly Phe Asn Ser Ser Ala 305 310 315 Asn Val Pro Thr Glu Gly Phe Gln Phe 325 <210> 4693 <211> 57 <212> PRT <213> Homo sapiens

4265

His Tyr Gly Lys Phe Ile Lys Lys Leu Ala Pro Leu Ser Ser Ser 35 40 45 Asn Ala His Lys Glu Met Glu Asp Ile <210> 4694 <211> 69 <212> PRT <213> Homo sapiens <400> 4694 Gly Lys Gly Ser Lys Pro Leu Lys Met Cys Phe Val Ile Arg Ser Ala 5 10 Leu Gln Thr Lys Tyr Ala Arg Cys Pro Phe Glu Ala Ser Glu Leu Ser 20 Leu Gln Gly Phe Lys Ala Thr Phe Gln Gln Glu Lys Ala Leu Arg Ala 40 Arg Arg Phe Ile Lys Glu Gly Lys Ala Leu Val Ser Leu Leu Arg Lys Val Gly Phe Leu Ala 65 <210> 4695 <211> 461 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (312) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (406) <223> Xaa equals any of the naturally occurring L-amino acids Gly Ser Pro Arg Leu Leu Gly Ala Ala Ala Leu Ala Leu Gly Gly Ala 5 15

Leu Gly Leu Tyr His Thr Ala Arg Trp His Leu Arg Ala Gln Asp Leu His Ala Glu Arg Ser Ala Ala Gln Leu Ser Leu Ser Arg Leu Gln Leu Thr Leu Tyr Gln Tyr Lys Thr Cys Pro Phe Cys Ser Lys Val Arg Ala Phe Leu Asp Phe His Ala Leu Pro Tyr Gln Val Val Glu Val Asn Pro Val Arg Arg Ala Glu Ile Lys Phe Ser Ser Tyr Arg Lys Val Pro Ile Leu Val Ala Gln Glu Gly Glu Ser Ser Gln Gln Leu Asn Asp Ser Ser Val Ile Ile Ser Ala Leu Lys Thr Tyr Leu Val Ser Gly Gln Pro Leu Glu Glu Ile Ile Thr Tyr Tyr Pro Ala Met Lys Ala Val Asn Glu Gln Gly Lys Glu Val Thr Glu Phe Gly Asn Lys Tyr Trp Leu Met Leu Asn Glu Lys Glu Ala Gln Gln Val Tyr Gly Gly Lys Glu Ala Arg Thr Glu Glu Met Lys Trp Arg Gln Trp Ala Asp Asp Trp Leu Val His Leu Ile Ser Pro Asn Val Tyr Arg Thr Pro Thr Glu Ala Leu Ala Ser Phe Asp Tyr Ile Val Arg Glu Gly Lys Phe Gly Ala Val Glu Gly Ala Val Ala Lys Tyr Met Gly Ala Ala Ala Met Tyr Leu Ile Ser Lys Arg Leu Lys Ser Arg His Arg Leu Gln Asp Asn Val Arg Glu Asp Leu Tyr Glu Ala Ala Asp Lys Trp Val Ala Ala Val Gly Lys Asp Arg Pro Phe Met Gly Gly Gln Lys Pro Asn Leu Ala Asp Leu Ala Val Tyr Gly Val Leu 280 . 285

4267

Arg Val Met Glu Gly Leu Asp Ala Phe Asp Asp Leu Met Gln His Thr 295 His Ile Gln Pro Trp Tyr Leu Xaa Val Glu Arg Ala Ile Thr Glu Ala 310 315 Pro Gln Arg Thr Glu Cys Pro Pro Arg Arg Ala Glu Gly Arg Gln Ala 325 330 Glu Asp Ala Ser Cys Pro Arg Pro Gly Pro Leu Gly Pro Ala Pro Gly 345 340 Asp Thr Gly Trp Gly Gln Asp His Ser Ala Pro Cys Pro Arg Thr Pro 360 Thr Ser Pro Leu Ala Ser Asn Thr Gly His Leu Leu Gly Leu Arg Asp . 375 Val Arg Asp Glu Phe Gln Pro Cys His Cys Pro Gly Ala Thr Pro Pro 385 390 395 Cys Pro Cys Leu Pro Xaa Cys Arg Pro Ser Ser Trp Thr Leu Ser Gly 405 410 Cys Pro Met Ala Thr Ser Cys Gly Trp Gly Pro Ser Thr Gly Gln Gln 425 Asp Gly Leu Phe Ser Val Glu Ser His Pro Trp Val Pro Leu Val Pro 435 440 Thr Leu Pro Lys Pro Pro Gly Thr Gly Thr Cys Leu Gln 450 455 460 <210> 4696 <211> 274

<212> PRT

<213> Homo sapiens

<400> 4696

Thr Ser Arg Gln Asn Lys Thr Glu Asn Leu Leu Glu Ser Arg Met Met

1 5 10 15

Asp Pro Cys Ser Val Gly Val Gln Leu Arg Thr Thr Asn Glu Cys His
20 25 30

Lys Thr Tyr Tyr Thr Arg His Thr Gly Phe Lys Thr Leu Gln Glu Leu 35 40 45

Ser Ser Asn Asp Met Leu Leu Gln Leu Arg Thr Gly Met Thr Leu

4268

55 50 Ser Gly Asn Asn Thr Ile Cys Phe His His Val Lys Ile Tyr Ile Asp 70 75 Arg Phe Glu Asp Leu Gln Lys Ser Cys Cys Asp Pro Phe Asn Ile His 90 Lys Lys Leu Ala Lys Lys Asn Leu His Val Ile Asp Leu Asp Asp Ala 105 110 100 Thr Phe Leu Ser Ala Lys Phe Gly Arg Gln Leu Val Pro Gly Trp Lys 115 120 Leu Cys Pro Lys Cys Thr Gln Ile Ile Asn Gly Ser Val Asp Val Asp 135 Thr Glu Asp Arg Gln Lys Arg Lys Pro Glu Ser Asp Gly Arg Thr Ala 155 150 Lys Ala Leu Arg Ser Leu Gln Phe Thr Asn Pro Gly Arg Gln Thr Glu 170 165 Phe Ala Pro Glu Thr Gly Lys Arg Glu Lys Arg Arg Leu Thr Lys Asn 185 180 Ala Thr Ala Gly Ser Asp Arg Gln Val Ile Pro Ala Lys Ser Lys Val 200 Tyr Asp Ser Gln Gly Leu Leu Ile Phe Ser Gly Met Asp Leu Cys Asp 220 210 215 Cys Leu Asp Glu Asp Cys Leu Gly Cys Phe Tyr Ala Cys Pro Ala Cys 225 230 235 Gly Ser Thr Lys Cys Gly Ala Glu Cys Arg Cys Asp Arg Lys Trp Leu 250 Tyr Glu Gln Ile Glu Ile Glu Gly Glu Ile Ile His Asn Lys His 265

Ala Gly

<210> 4697

<211> 122

<212> PRT

<213> Homo sapiens

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<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4697
Leu Gly Asp Glu Thr Gly Ser Ser Met Thr His Leu Ile Glu Tyr Asp
                                     10
Arg His Xaa Lys Ser Arg Leu Xaa Pro Leu Gln His Leu Tyr Leu Leu
             20
                                 25
Pro Ala Asp His Ser Arg Asn Ala Ala Glu Arg Phe Pro Gly Ala Trp
         35
                             40
Phe Gln Xaa Pro Thr Val Asp Ser Glu Ala Ser Ala Phe Ala Gly Gly
Leu Pro Val Ile Phe Trp Ser Trp Ala Gly Leu Val Gly Phe Pro Phe
                     70
                                          75
 65
Val Trp Pro Val Ser Xaa Cys Leu Asn Pro Leu Ser Phe Ile Lys Ser
                                     90
                 85
Lys Thr Lys Glu Lys Lys Lys Lys Lys Lys Lys Phe Gly Gly Gly
                                105
                                                     110
Xaa Arg Tyr Pro Ile Gly Pro Leu Gly Gly
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<210> 4698
<211> 64
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4698
Asn Ser Gly Ser His Asn Ile Val Ala Ser Arg Ser Xaa Xaa Ile Phe
                  5
                                     10
Asp Gln Asp Asp Xaa Asn Gly Leu Thr Trp Val Phe Ile Val Tyr Gln
             20
Ile Leu His Thr Lys Glu Trp Lys Tyr Ser Phe Thr Lys Phe Leu Arg
                             40
Lys Ile Phe Leu Pro Ile Tyr His Asn Tyr Arg Met Asp Ile Cys Phe
                         55
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<210> 4699
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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4271

<222> (82) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (83) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4699 Gly Ala Arg Leu Gly Ala Leu Gln Ala Ala Pro Gln Pro Gly Thr Pro 10 Thr Pro Leu Arg Ser Pro Gln Ala Ser Gly Pro His Pro Ser Glu Ala 25 Gln Gly Ser Pro Val His Ala Gly Phe Ser Pro Gly Pro Met Ser Phe 40 Leu Ala Gly Leu Gly Leu Ala Val Gly Leu Ala Leu Leu Tyr Cys 55 Tyr Pro Pro Asp Pro Lys Gly Leu Pro Gly Thr Arg Arg Val Xaa Gly 70 75 Phe Xaa Xaa Val Ile Ile Asp Arg His Val Ser Arg Tyr Leu Leu Ala 90 Phe Leu Ala Asp Asp Leu Gly Gly Leu 100 105 <210> 4700 <211> 232 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (32) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (149) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4700 Gly Ala Ile Gly Thr Ser Ser Pro Ala Leu Leu Glu Cys Gln Glu Gly 1 5 10

4272

Val Gly Pro Ala Arg Pro Ser Leu Leu Val Pro Pro Pro Pro Arg Xaa 20 25 30

Arg Arg Leu Asp Leu Ala Arg Thr Leu Pro Ala Glu Arg Thr Asp Ser 35 40 45

Gln Ser Leu Tyr Ile Val Tyr Ile Ala Leu Pro Gly Arg Thr Pro Arg
50 55 60

Pro Ala Leu Ala Phe Ala Phe Leu Met Pro Ala Cys Cys Asn Arg Pro 65 70 75 80

Ser Pro Arg Pro Ser Pro Ala His Leu Thr Ala Ser Ser Val Leu Arg 85 90 95

Arg Gln Arg His Val Leu Ala Ala Ser Ala Ala Ser Pro Cys Gln Trp 100 105 110

Ser Gly Leu Arg Val Ala His Ser Leu Arg Gln Val Val Ser Leu Cys 115 120 125

Pro Arg Cys Thr Gly Ser Cys Pro Phe Ser Gly Ala Cys Ala Ser Ser 130 135 140

Leu Pro Ser Pro Xaa Ser Cys Pro His Ser His Ser Gly Ser Trp Gly 145 150 155 160

Thr Trp Ser Gln Gly Arg Pro Cys Ser Ser Thr Glu Val Ala Gly Leu 165 170 175

Ala Leu Trp Pro Thr Asp Phe Leu Ser Cys Leu Leu Asp Ala Ser Glu 180 185 190

Leu Gln Thr Gln Gly Ser His Gly Phe Ser Phe Thr Pro Thr Gly Phe 195 200 205

Ser Ser Asn Arg Lys Val Gly Val Gly Ser Cys Arg Asp Gly Ala Gly 210 215 220

Arg Gly Ala Met Gly Gly Leu Phe 225 230

<210> 4701

<211> 665

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

4273

<222> (17) <223> Xaa equals any of the naturally occurring L-amino acids <221> SITE <222> (107) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (111) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4701 Asp Val His His Arg Ala Glu Cys Arg Ala Asp Arg His Arg Arg Glu 10 Xaa Leu Tyr Asp Met Phe Val Asn Phe Pro Asp Gln Pro Val Val Trp 20 25 Arg Glu Ile Ser Ile Ile Thr Ser Ala Leu Arg Asn Asp Ser Gln Asp 40 Lys Gln Thr Gln Phe Leu Arg Ser Leu Phe Glu Thr Leu Pro Gly Arg 55 Val Gln Cys Glu Met Leu Leu Lys Val Thr Glu Gln Cys Phe Asn Thr 70 75 Leu Glu Arg Ser Glu Met Leu Leu Leu Leu Leu Arg Arg Phe Pro Glu 85 Thr Val Val Gln His Gly Val Gly Leu Gly Xaa Ala Leu Leu Xaa Ala 100 105 110 Glu Thr Ile Xaa Glu Gln Glu Ser Pro Val Asn Cys Phe Arg Lys Leu 120 Phe Val Cys Asp Val Leu Pro Leu Ile Ile Asn Asn His Asp Val Arg 130 135 Leu Pro Ala Asn Leu Leu Tyr Lys Tyr Leu Asn Lys Ala Ala Glu Phe 145 155 Tyr Ile Asn Tyr Val Thr Arg Ser Thr Gln Ile Glu Asn Gln His Gln 175 165 170

Gly	Ala	Gln	Asp 180	Thr	Ser	Asp	Leu	Met 185	Ser	Pro	Ser	Lys	Arg 190	Ser	Ser
Gln	Lys	Туг 195	Ile	Ile	Glu	Gly	Leu 200	Thr	Glu	Lys	Ser	Ser 205	Gln	Ile	Val
Asp	Pro 210	Trp	Glu	Arg	Leu	Phe 215	Lys	Ile	Leu	Asn	Val 220	Val	Gly	Met	Arg
Cys 225	Glu	Trp	Gln	Met	Asp 230	Lys	Gly	Arg	Arg	Ser 235	Tyr	Gly	Asp	Ile	Leu 240
His	Arg	Met	Lys	Asp 245	Leu	Суз	Arg	Tyr	Met 250	Asn	Asn	Phe	Asp	Ser 255	Glu
Ala	His	Ala	Lys 260	Tyr	Lys	Asn	Gln	Val 265	Val	Tyr	Ser	Thr	Met 270	Leu	Val
Phe	Phe	Lys 275	Asn	Ala	Phe	Gln	Туг 280	Val	Asn	Ser	Ile	Gln 285	Pro	Ser	Leu
Phe	Gln 290	Gly	Pro	Asn	Ala	Pro 295	Ser	Gln	Val	Pro	Leu 300	Val	Leu	Leu	Glu
Asp 305	Val	Ser	Asn	Val	Tyr 310	Gly	Asp	Val	Glu	Ile 315	Asp	Arg	Asn	Lys	His 320
Ile	His	Lys	Lys	Arg 325	Lys	Leu	Ala	Glu	Gly 330	Arg	Glu	Lys	Thr	Met 335	Ser
Ser	Asp	Asp	Glu 340	Asp	Суѕ	Ser	Ala	Lys 345	Gly	Arg	Asn	Arg	His 350	Ile	Val
Val	Asn	Lys 355	Ala	Glu	Leu	Ala	Asn 360	Ser	Thr	Glu	Val	Leu 365	Glu	Ser	Phe
Lys	Leu 370	Ala	Arg	Glu	Ser	Trp 375	Glu	Leu	Leu	Tyr	Ser 380	Leu	Glu	Phe	Leu
Asp 385	Lys	Glu	Phe	Thr	Arg 390	Ile	Cys	Leu	Ala	Trp 395	Lys	Thr	Asp	Thr	Trp 400
Leu	Trp	Leu	Arg	Ile 405	Phe	Leu	Thr	Asp	Met 410	Ile	Ile	Tyr	Gln	Gly 415	Gln
Tyr	Lys	Lys	Ala 420	Ile	Ala	Ser	Leu	His 425	His	Leu	Ala	Ala	Leu 430	Gln	Gly
Ser	Ile	Ser 435	Gln	Pro	Gln	Ile	Thr 440	Gly	Gln	Gly	Thr	Leu 445	Glu	His	Gln

Arg	Ala 450	Leu	Ile	Gln	Leu	Ala 455	Thr	Cys	His	Phe	Ala 460	Leu	Gly	Glu	Tyr
Arg 465	Met	Thr	Cys	Glu	Lys 470	Val	Leu	Asp	Leu	Met 475	Cys	Tyr	Met	Val	Leu 480
Pro	Ile	Gln	Asp	Gly 485	Gly	Lys	Ser	Gln	Glu 490	Glu	Pro	Ser	Lys	Val 495	Lys
Pro	Lys	Phe	Arg 500	Lys	Gly	Ser	Asp	Leu 505	Lys	Leu	Leu	Pro	Cys 510	Thr	Ser
Lys	Ala	Ile 515	Met	Pro	Tyr	Суз	Leu 520	His	Leu	Met	Leu	Ala 525	Суз	Phe	Lys
Leu	Arg 530	Ala	Phe	Thr	Asp	Asn 535	Arg	Asp	Asp	Met	Ala 540	Leu	Gly	His	Val
Ile 545	Val	Leu	Leu	Gln	Gln 550	Glu	Trp	Pro	Arg	Gly 555	Glu	Asn	Leu	Phe	Leu 560
Lys	Ala	Val	Asn	Lys 565	Ile	Cys	Gln	Gln	Gly 570	Asn	Phe	Gln	Tyr	Glu 575	Asn
Phe	Phe	Asn	Tyr 580	Val	Thr	Asn	Ile	Asp 585	Met	Leu	Glu	Glu	Phe 590	Ala	Tyr
Leu	Arg	Thr 595	Gln	Glu	Gly	Gly	Lys 600	Ile	His	Leu	Glu	Leu 605	Leu	Pro	Asn
Gln	Gly 610	Met	Leu	Ile	Lys	His 615	His	Thr	Val	Thr	Arg 620	Gly	Ile	Thr	Lys
Gly 625	Val	Lys	Glu	Asp	Phe 630	Arg	Leu	Ala	Met	Glu 635	Arg	Gln	Val	Ser	Arg 640
Cys	Gly	Glu	Asn	Leu 645	Met	Val	Val	Leu	His 650	Arg	Phe	Cys	Ile	Asn 655	Glu
Lys	Ile	Leu	Leu 660	Leu	Gln	Thr	Leu	Thr 665							

<210> 4702

<211> 85

<212> PRT

<213> Homo sapiens

<400> 4702

4276

Val Lys Ser Glu Asp Leu Asn Glu Val Thr Pro Lys Leu Ser Gln Ser 1 5 10 15

His Val Phe Leu Thr Leu Gly Ile Ser Asn Ser Ile Tyr Thr Ala Phe 20 25 30

Phe Lys Cys Asn Phe Gln Arg Cys Leu Leu Pro His Pro Leu Leu Leu 35 40

Ser Ile Ile Ile Asp Phe Trp Arg Leu Thr Lys Gln Ala Ile Pro Lys 50 55 60

Phe Ser Pro Arg Lys Val Ser Trp Ile Lys Trp Phe Leu Arg Thr Leu 65 70 75 80

Arg Val Tyr Ile Leu

<210> 4703

<211> 99

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (81)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4703

Cys Asn Leu Tyr Ser Trp Arg Asn Lys Ile Phe Ile Trp Asp Tyr Phe 1 5 10 15

Leu Gln Pro Phe Asn Lys His Leu Leu Tyr Ala Thr Lys Arg Gln Ala 20 25 30

Arg Arg Trp Ala Leu Gln Thr Gln Trp Leu Val Ala Val Trp Thr Trp 35 40 45

Ser Leu Leu Ala Trp Asn Pro Ser Leu Pro Asn Met Gln Ser Pro His 50 55 60

Leu Lys Ala Ser Leu Cys Pro Phe Ser Asp Ala Leu Phe Arg Asn Ala 65 70 75 80

Xaa Pro Leu Tyr Ser Glu Ile Arg Arg His Lys Thr Ser Ser Lys Ser 85 90 95

Leu Leu Trp

4277

<210> 4704

<211> 215 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (7) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4704 Leu Gly Ala Val Gly Ala Xaa Leu Arg Gly Leu Arg Gly Cys Arg Gly Ala Arg Gly Ala Gly Gly Lys Ala His Leu Gly Trp Pro Trp Arg Ala 25 Gly Gly Asp Met Glu Asp Gly Val Leu Lys Glu Gly Phe Leu Val Lys 35 Arg Gly His Ile Val His Asn Trp Lys Ala Arg Trp Phe Ile Leu Arg Gln Asn Thr Leu Val Tyr Tyr Lys Leu Glu Gly Gly Arg Arg Val Thr 70 75 Pro Pro Lys Gly Arg Ile Leu Leu Asp Gly Cys Thr Ile Thr Cys Pro 85 90 95 Cys Leu Glu Tyr Glu Asn Arg Pro Leu Leu Ile Lys Leu Lys Thr Gln 100 105 Thr Ser Thr Glu Tyr Phe Leu Glu Ala Cys Ser Arg Glu Glu Arg Asp 120 125 Ala Trp Ala Phe Glu Ile Thr Gly Ala Ile His Ala Gly Gln Pro Gly 130 135 Lys Val Gln Gln Leu His Ser Leu Arg Asn Ser Phe Lys Leu Pro Pro 145 150 155 160 His Ile Ser Leu His Arg Ile Val Asp Lys Met His Asp Ser Asn Thr 165 170 Gly Ile Arg Ser Ser Pro Asn Met Glu Gln Gly Ser Thr Tyr Lys Lys 185 Thr Phe Leu Gly Ser Ser Trp Trp Thr Gly Ser Ser Pro Thr Ala Ser

4278

205 200 195 Arg Ala Ala Val Trp Arg Arg 210 215 <210> 4705 <211> 112 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (9) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (69) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (103) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4705 Asp Leu Pro Pro Leu Leu Val Phe Xaa Ala Val Lys Thr Leu Ser Thr Val Thr Tyr Phe Leu Ser Gln Ala Ala Ser His Leu Val Pro Cys Ala 20 25 Asp Ser Ser Thr Val Ala Arg Ile Gln Tyr Glu Ser Arg Gly Asp Arg 40 45 35 Arg Met Val Gly Ala Ala Gly Phe Ser Thr Tyr Pro Ser His Gln Gly Pro Asp Ala Leu Xaa Pro Ala Pro Ser Ala His Pro Cys Ala Gln Leu 70 75 Glu Gly Cys Met Ala Arg Ser Pro Leu Phe Arg Trp Val Glu Thr Leu 85 90 Met Ile Pro Ala Pro Pro Xaa Arg Ala Pro Ala Thr Glu Gln Ala Leu

105

100

4279

<210> 4706 <211> 63 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (18) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4706 Gln Ser Arg His Gln Leu Ala Trp Leu Leu Gly Met Ala Ile Gly Gly Ser Xaa Cys Gly Pro Leu Leu Ala Asn Cys Met Gln Pro Pro Thr Leu 25 20 Arg Met Phe Ala Trp Ala Glu Asn Ala Glu Thr Leu Trp Pro Asp Leu 40 45 35 Thr Val Ser Thr Trp Gln Trp Ala Leu Trp Thr Gln His Phe Ser 55 50 <210> 4707 <211> 578 <212> PRT <213> Homo sapiens <400> 4707 Pro Thr Ala Ser Ala Gly Ala Arg Trp Ser His Lys Thr Ala Ser Val 10 Leu Gln Ser Val Ser Leu Glu Val Thr Arg Ala Thr Ala Gly Met Val Leu Ala Glu Leu Tyr Val Ser Asp Arg Glu Gly Ser Asp Ala Thr Gly 40 Asp Gly Thr Lys Glu Lys Pro Phe Lys Thr Gly Leu Lys Ala Leu Met 50 55 60 Thr Val Gly Lys Glu Pro Phe Pro Thr Ile Tyr Val Asp Ser Gln Lys 65 Glu Asn Glu Arg Trp Asn Val Ile Ser Lys Ser Gln Leu Lys Asn Ile 85 90

Lys	Lys	Met	Trp 100	His	Arg	Glu	Gln	Met 105	Lys	Ser	Glu	Ser	Arg 110	Glu	Lys
Lys	Glu	Ala 115	Glu	Asp	Ser	Leu	Arg 120	Arg	Glu	Lys	Asn	Leu 125	Glu	Glu	Ala
Lys	Lys 130	Ile	Thr	Ile	Lys	Asn 135	Asp	Pro	Ser	Leu	Pro 140	Glu	Pro	Lys	Cys
Val 145	Lys	Ile	Gly	Ala	Leu 150	Glu	Gly	Tyr	Arg	Gly 155	Gln	Arg	Val	Lys	Val 160
Phe	Gly	Trp	Val	His 165	Arg	Leu	Arg	Arg	Gln 170	Gly	Lys	Asn	Leu	Met 175	Phe
Leu	Val	Leu	Arg 180	Asp	Gly	Thr	Gly	Tyr 185	Leu	Gln	Cys	Val	Leu 190	Ala	Asp
Glu	Leu	Cys 195	Gln	Cys	Tyr	Asn	Gly 200	Val	Leu	Leu	Ser	Thr 205	Glu	Ser	Ser
Val	Ala 210	Val	Tyr	Gly	Met	Leu 215	Asn	Leu	Thr	Pro	Lys 220	Gly	Lys	Gln	Ala
Pro 225	Gly	Gly	His	Glu	Leu 230	Ser	Cys	Asp	Phe	Trp 235	Glu	Leu	Ile	Gly	Leu 240
Ala	Pro	Ala	Gly	Gly 245	Ala	Asp	Asn	Leu	Ile 250	Asn	Glu	Glu	Ser	Asp 255	Val
Asp	Val	Gln	Leu 260	Asn	Asn	Arg	His	Met 265	Met	Ile	Arg	Gly	Glu 270	Asn	Met
Ser	Lys	Ile 275	Leu	Lys	Ala	Arg	Ser 280	Met	Val	Thr	Arg	Cys 285	Phe	Arg	Asp
His	Phe 290	Phe	Asp	Arg	Gly	Tyr 295	Tyr	Glu	Val	Thr	Pro 300	Pro	Thr	Leu	Val
Gln 305	Thr	Gln	Val	Glu	Gly 310	Gly	Ala	Thr	Leu	Phe 315	Lys	Leu	Asp	Tyr	Phe 320
Gly	Glu	Glu	Ala	Phe 325	Leu	Thr	Gln	Ser	Ser 330	Gln	Leu	Tyr	Leu	Glu 335	Thr
Cys	Leu	Pro	Ala 340	Leu	Gly	Asp	Val	Phe	Cys	Ile	Ala	Gln	Ser 350	Tyr	Arg
Ala	Glu	Gln 355	Ser	Arg	Thr	Arg	Arg 360	His	Leu	Ala	Glu	Туr 365		His	Val

PCT/US00/26524 WO 01/22920

4281

Glu Ala Glu Cys Pro Phe Leu Thr Phe Asp Asp Leu Leu Asn Arg Leu 370 375 Glu Asp Leu Val Cys Asp Val Val Asp Arg Ile Leu Lys Ser Pro Ala 395 390 Gly Ser Ile Val His Glu Leu Asn Pro Asn Phe Gln Pro Pro Lys Arg 405 410 Pro Phe Lys Arg Met Asn Tyr Ser Asp Ala Ile Val Trp Leu Lys Glu 425 420 His Asp Val Lys Lys Glu Asp Gly Thr Phe Tyr Glu Phe Gly Glu Asp 435 440 445 Ile Pro Glu Ala Pro Glu Arg Leu Met Thr Asp Thr Ile Asn Glu Pro 455 460 Ile Leu Leu Cys Arg Phe Pro Val Glu Ile Lys Ser Phe Tyr Met Gln 470 475 Arg Cys Pro Glu Asp Ser Arg Leu Thr Glu Ser Val Asp Val Leu Met 490 Pro Asn Val Gly Glu Ile Val Gly Gly Ser Met Arg Ile Phe Asp Ser 500 505 Glu Glu Ile Leu Ala Gly Tyr Lys Arg Glu Gly Ile Asp Pro Thr Pro 520 Tyr Tyr Trp Tyr Thr Asp Gln Arg Lys Tyr Gly Thr Cys Pro His Gly 535 540 Gly Tyr Gly Leu Gly Leu Glu Arg Phe Leu Thr Trp Ile Leu Asn Arg 555 560 545 550 Tyr His Ile Arg Asp Val Cys Leu Tyr Pro Arg Phe Val Gln Arg Cys 570 575 565

Thr Pro

<210> 4708

<211> 153

<212> PRT

<213> Homo sapiens

<220>

4282

<221> SITE <222> (105) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (106) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (134) <223> Xaa equals any of the naturally occurring L-amino acids Pro Leu Asn Gly Leu Leu Gly Gly Leu Asn Gly Ala Ala Pro Asn Pro Ala Ser Leu Ser Gln Ala Gly Gly Ala Pro Thr Leu Gln Leu Pro 20 25 Gly Cys Leu Asn Ser Leu Thr Glu Gln Gln Arg His Leu Leu Gln Gln 40 Gln Glu Gln Gln Leu Gln Gln Leu Gln Leu Leu Ala Ser Pro Gln 50 55 Leu Thr Pro Glu His Gln Thr Val Val Tyr Gln Met Ile Gln Gln Ile 65 70 Gln Gln Lys Arg Glu Leu Gln Arg Leu Gln Met Ala Gly Gly Ser Gln 85 90 Leu Pro Met Ala Ser Leu Leu Ala Xaa Xaa Ser Thr Pro Leu Leu Ser 105 110 Ala Gly Thr Pro Gly Leu Leu Pro Thr Xaa Ser Ala Pro Pro Leu Leu 115 120 125 Pro Ala Gly Ala Leu Xaa Ala Pro Ser Leu Gly Asn Asn Thr Ser Leu 135 140 130 Met Ala Ala Ala Ala Ala Gln Gln 150 145

4283

<210> 4709

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<211> 77
<212> PRT
<213> Homo sapiens
<400> 4709
Thr Cys Tyr Ile Leu Pro Lys Thr Ala Pro Leu Glu Cys Arg Ala Pro
                                     10
Leu Arg Ser Pro Ser Pro Leu Gly Arg Leu Gln Val Leu Pro Arg Ser
                                 25
             20
Pro Leu His Val His Thr His Asn Ser Gly Lys Glu Val Leu Gly Leu
        35
Gln Val Gln Arg Ser Arg Ser Gly Thr Gly Pro Ala Cys Ser Gln Ala
                         55
Gly Ser Gly Ala Val Gln Gly Gly Asn Trp Cys Ile Phe
                     70
<210> 4710
<211> 172
<212> PRT
<213> Homo sapiens
<220>
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<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (166)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4710
Leu Glu Pro Leu Gly Leu Glu Ser Gly Arg Gly Leu Pro Ser Gln Pro
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4284

10 15 1 5 Leu Ser Phe Leu Pro Arg Pro Gln Glu Leu Leu Gln Thr Gln Asp Phe 25 Ser Lys Phe Gln Ala Leu Lys Pro Lys Leu Leu Asp Thr Val Asp Asp 40 Met Leu Ala Asn Asp Ile Ala Arg Leu Met Val Met Val Arg Gln Glu 55 50 Glu Ser Leu Met Pro Xaa Gln Val Val Lys Gly Gly Ala Phe Xaa Gly 70 Thr Met Asn Gly Pro Phe Gly His Gly Tyr Gly Glu Gly Ala Gly Glu Gly Ile Asp Asp Val Glu Trp Val Val Gly Lys Asp Lys Pro Thr Tyr 100 105 Asp Glu Ile Phe Tyr Thr Leu Ser Pro Val Asn Gly Lys Ile Thr Gly 115 120 Ala Asn Ala Lys Xaa Glu Met Val Lys Val Gln Ala Ser Gln His Arg 135 Ala Lys Gly Lys Ile Trp Lys Leu Ala Asp Trp Thr Arg Thr Gly Leu 150 155 Leu Asp Asp Lys Glu Xaa Ala Leu Gly Asn His Leu 165 170 <210> 4711 <211> 193 <212> PRT <213> Homo sapiens <400> 4711 Leu Gln Ala Arg Leu Leu Ser Ala Lys Gly Glu Ile Trp Met Ala Ser 1.0 Thr Ser Tyr Asp Tyr Cys Arg Val Pro Met Glu Asp Gly Asp Lys Arg 20 Cys Lys Leu Leu Gly Ile Gly Ile Leu Val Leu Leu Ile Ile Val Ile Leu Gly Val Pro Leu Ile Ile Phe Thr Ile Lys Ala Asn Ser Glu 55 60 50

4285

Ala Cys Arg Asp Gly Leu Arg Ala Val Met Glu Cys Arg Asn Val Thr
65 70 75 80

His Leu Leu Gln Gln Glu Leu Thr Glu Ala Gln Lys Gly Phe Gln Asp 85 90 95

Val Glu Ala Gln Ala Ala Thr Cys Asn His Thr Val Met Ala Leu Met 100 105 110

Ala Ser Leu Asp Ala Glu Lys Ala Gln Gly Gln Lys Lys Val Glu Glu 115 120 125

Leu Glu Gly Glu Ile Thr Thr Leu Asn His Lys Leu Gln Asp Ala Ser 130 135 140

Ile Ala Asp Lys Lys Tyr Tyr Pro Ser Ser Gln Asp Ser Ser Ser Ala 165 170 175

Ala Ala Pro Gln Leu Leu Ile Val Leu Leu Gly Leu Ser Ala Leu Leu 180 185 190

Gln

<210> 4712

<211> 69

<212> PRT

<213> Homo sapiens

<400> 4712

Leu Glu Gly Ala Leu Thr Arg Thr Glu His Trp Ser Asn Asn Leu Ala 1 5 . 10 15

Thr Phe Pro Trp Lys Arg Ser Ala Arg Ser Gln Ile Arg Arg Asp Ala 20 25 30

Pro Ala Gly Lys Gly Gly Gly Cys Lys Thr Arg Ala Val Ser Leu Gly 35 40 , 45

Arg Lys Ala Val Val Ser Pro Gln Gly Val Gln Leu Cys Gly Thr His 50 55 60

Thr Tyr Arg Ser Lys

4286

<210> 4713 <211> 205 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (122) <223> Xaa equals any of the naturally occurring L-amino acids Val Lys Thr Pro Pro Arg Val Leu Thr Leu Ser Glu Arg Pro Leu Asp 10 Phe Leu Asp Leu Glu Arg Pro Pro Thr Thr Pro Gln Asn Glu Glu Ile 20 25 Arg Ala Val Gly Arg Leu Lys Arg Glu Arg Ser Met Ser Glu Asn Ala 40 Val Arg Gln Asn Gly Gln Leu Val Arg Asn Asp Ser Leu Val Thr Pro 50 Ser Pro Gln Gln Ala Arg Val Cys Pro Pro His Met Leu Pro Glu Asp 65 70 75 Gly Ala Asn Leu Ser Ser Ala Arg Gly Ile Leu Ser Leu Ile Gln Ser 90 Ser Thr Arg Arg Ala Tyr Gln Gln Ile Leu Asp Val Leu Asp Glu Asn Arg Arg Pro Val Leu Arg Gly Gly Ser Xaa Ala Ala Thr Ser Asn Pro 115 120 125 His His Asp Asn Val Arg Tyr Gly Ile Ser Asn Ile Asp Thr Thr Ile 135 Glu Gly Thr Ser Asp Asp Leu Thr Val Val Asp Ala Ala Ser Leu Arg 150 155 Arg Gln Ile Ile Lys Leu Asn Arg Arg Leu Gln Leu Leu Glu Glu Glu Asn Lys Glu Arg Ala Lys Arg Glu Met Val Met Tyr Ser Ile Thr Val 190 180 185 Ala Phe Trp Leu Leu Asn Ser Trp Leu Trp Phe Arg Arg 195 200

)> 47														
<211> 408 <212> PRT															
<213	8> Hc	omo s	apie	ens											
<400)> 47	714													
			Pro	Phe	Glv	Lvs	Pro	Gln	Pro	Gln	Ser	Ara	Ara	Ara	Pro
1		Dou		5	0_1	-1-		0111	10	02		5	5	15	
Leu	Arg	Pro	Pro 20	Ser	Ala	Ser	Ser	Ala 25	Ser	Arg	Pro	Ala	Arg 30	Gly	Ser
Leu	Arg	Arg 35	Ala	Met	Ala	Thr	Ser 40	Pro	Gln	Lys	Ser	Pro 45	Ser	Val	Pro
Lys	Ser 50	Pro	Thr	Pro	Lys	Ser 55	Pro	Pro	Ser	Arg	Lys 60	Lys	Asp	Asp	Ser
Phe 65	Leu	Gly	Lys	Leu	Gly 70	Gly	Thr	Leu	Ala	Arg 75	Arg	Lys	Lys	Ala	Lys 80
Glu	Val	Ser	Glu	Leu 85	Gln	Glu	Glu	Gly	Met 90	Asn	Ala	Ile	Asn	Leu 95	Pro
Leu	Ser	Pro	Ile 100	Pro	Phe	Glu	Leu	Asp 105	Pro	Glu	Asp	Thr	Met 110	Leu	Glu
Glu	Asn	Glu 115	Val	Arg	Thr	Met	Val 120	Asp	Pro	Asn	Ser	Arg 125	Ser	Thr	Pro
Lys	Leu 130	Gln	Glu	Leu	Met	Lys 135	Val	Leu	Ile	Asp	Trp 140	Ile	Asn	Asp	Val
Leu 145	Val	Gly	Glu	Arg	Ile 150	Ile	Val	Lys	Asp	Leu 155	Ala	Glu	Asp	Leu	Tyr 160
Asp	Gly	Gln		Leu 165	Gln	Lys	Leu		Glu 170	Lys	Leu	Glu	Ser	Glu 175	Lys
Leu	Asn	Val	Ala 180	Glu	Val	Thr	Gln	Ser 185	Glu	Ile	Ala	Gln	Lys 190	Gln	Lys
Leu	Gln	Thr 195	Val	Leu	Glu	Lys	Ile 200	Asn	Glu	Thr	Leu	Lys 205	Leu	Pro	Pro
Arg	Ser 210	Ile	Lys	Trp	Asn	Val 215	Asp	Ser	Val	His	Ala 220	Lys	Ser	Leu	Val

4288

Ala Ile Leu His Leu Leu Val Ala Leu Ser Gln Tyr Phe Arg Ala Pro 230 235 Ile Arg Leu Pro Asp His Val Ser Ile Gln Val Val Val Gln Lys 250 245 Arg Glu Gly Ile Leu Gln Ser Arg Gln Ile Gln Glu Glu Ile Thr Gly 260 265 Asn Thr Glu Ala Leu Ser Gly Arg His Glu Arg Asp Ala Phe Asp Thr 280 Leu Phe Asp His Ala Pro Asp Lys Leu Asn Val Val Lys Lys Thr Leu 295 300 Ile Thr Phe Val Asn Lys His Leu Asn Lys Leu Asn Leu Glu Val Thr 305 310 315 Glu Leu Glu Thr Gln Phe Ala Asp Gly Val Tyr Leu Val Leu Leu Met 330 325 Gly Leu Leu Glu Gly Tyr Phe Val Pro Leu His Ser Phe Phe Leu Thr 345 Pro Asp Ser Phe Glu Gln Lys Val Leu Asn Val Ser Phe Ala Phe Glu 360 Leu Met Gln Asp Gly Gly Leu Glu Lys Pro Lys Pro Arg Pro Glu Asp 370 375 Ile Val Asn Cys Asp Leu Lys Ser Thr Leu Arg Val Leu Tyr Asn Leu 390 395 400 Phe Thr Lys Tyr Arg Asn Val Glu 405

<210> 4715

<211> 314

<212> PRT

<213> Homo sapiens

<400> 4715

Asp Pro Tyr Ser Gln Ser Ala Thr Ala Phe Asn Glu Met Ile Gln Glu
1 5 10 15

Asn Gly Tyr Asn Phe Asp Arg Ser Ser Ser Thr Phe Ser Gly Ile Lys
20 25 30

Glu Leu Ala Arg Arg Phe Ala Leu Thr Phe Gly Leu Asp Gln Leu Lys

Thr Arg Glu Ala Ile Ala Met Leu His Lys Asp Gly Ile Glu Phe Ala Phe Lys Glu Pro Asn Pro Gln Gly Glu Ser His Pro Pro Leu Asn Leu Ala Phe Leu Asp Ile Leu Ser Glu Phe Ser Ser Lys Leu Leu Arg Gln Asp Lys Arg Thr Val Tyr Val Tyr Leu Glu Lys Phe Met Thr Phe Gln Met Ser Leu Arg Arg Glu Asp Val Trp Leu Pro Leu Met Ser Tyr Arg Asn Ser Leu Leu Ala Gly Gly Asp Asp Asp Thr Met Ser Val Ile Ser Gly Ile Ser Ser Arg Gly Ser Thr Val Arg Ser Lys Lys Ser Lys Pro Ser Thr Gly Lys Arg Lys Val Val Glu Gly Met Gln Leu Ser Leu Thr Glu Glu Ser Ser Ser Ser Asp Ser Met Trp Leu Ser Arg Glu Gln Thr Leu His Thr Pro Val Met Met Gln Thr Pro Gln Leu Thr Ser Thr Ile Met Arg Glu Pro Lys Arg Leu Arg Pro Glu Asp Ser Phe Met Ser Val Tyr Pro Met Gln Thr Glu His His Gln Thr Pro Leu Asp Tyr Asn Arg Arg Gly Thr Ser Leu Met Glu Asp Asp Glu Glu Pro Ile Val Glu Asp Val Met Met Ser Ser Glu Gly Arg Ile Glu Asp Leu Asn Glu Gly Met Asp Phe Asp Thr Met Asp Ile Asp Leu Pro Pro Ser Lys Asn Arg Arg Glu Arg Thr Glu Leu Lys Pro Asp Phe Phe Asp Pro Ala Ser Ile Met Asp Glu Ser Val Leu Gly Val Ser Met Phe

4290

305 310

180

<210> 4716 <211> 287 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (180) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4716 Arg Pro Cys Pro Glu Glu Ala Glu Ile Gly Ile Ala Met Gly Ser Gly 5 10 15 Thr Ala Val Ala Lys Thr Ala Ser Glu Met Val Leu Ala Asp Asp Asn 20 Phe Ser Thr Ile Val Ala Ala Val Glu Glu Gly Arg Ala Ile Tyr Asn 40 Asn Met Lys Gln Phe Ile Arg Tyr Leu Ile Ser Ser Asn Val Gly Glu 55 Val Val Cys Ile Phe Leu Thr Ala Ala Leu Gly Leu Pro Glu Ala Leu 70 65 Ile Pro Val Gln Leu Leu Trp Val Asn Leu Val Thr Asp Gly Leu Pro Ala Thr Ala Leu Gly Phe Asn Pro Pro Asp Leu Asp Ile Met Asp Arg 105 Pro Pro Arg Ser Pro Lys Glu Pro Leu Ile Ser Gly Trp Leu Phe Phe 115 120 Arg Tyr Met Ala Ile Gly Gly Tyr Val Gly Ala Ala Thr Val Gly Ala 130 Ala Ala Trp Trp Phe Leu Tyr Ala Glu Asp Gly Pro His Val Asn Tyr 150 155 Ser Gln Leu Thr His Phe Met Gln Cys Thr Glu Asp Asn Thr His Phe 165 170 Glu Gly Ile Xaa Cys Glu Val Phe Glu Ala Pro Glu Pro Met Thr Met

4291

Ala Leu Ser Val Leu Val Thr Ile Glu Met Cys Asn Ala Leu Asn Ser 195 200 205

Leu Ser Glu Asn Gln Ser Leu Leu Arg Met Pro Pro Trp Val Asn Ile 210 215 220

Trp Leu Leu Gly Ser Ile Cys Leu Ser Met Ser Leu His Phe Leu Ile 225 230 235 240

Leu Tyr Val Asp Pro Leu Pro Met Ile Phe Lys Leu Arg Ala Leu Asp 245 250 255

Leu Thr Gln Trp Leu Met Val Leu Lys Ile Ser Leu Pro Val Ile Gly 260 265 270

Leu Asp Glu Ile Leu Lys Phe Val Ala Arg Asn Tyr Leu Glu Gly 275 280 285

<210> 4717

<211> 47

<212> PRT

<213> Homo sapiens

<400> 4717

Gln Arg Pro Cys Gly Leu Gln Gly Pro Lys Tyr Leu Leu Ser Gly Leu
1 5 10 15

Leu Leu Lys Lys Phe Ser Gln Ala Trp Trp Trp Ala Pro Val Ile Pro 20 25 30

Ala Thr Arg Glu Ser Glu Ala Gly Glu Ser Leu Glu Pro Gly Arg 35 40 45

<210> 4718

<211> 436

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (382)

<223> Xaa equals any of the naturally occurring L-amino acids

)> 47														
Ala 1	Xaa	Asp	Pro	Ser 5	Arg	Val	Met	Asp	Gln 10	His	Lys	Leu	Thr	Arg 15	Asp
Gln	Trp	Glu	Asp 20	Arg	Ile	Gln	Val	Trp 25	His	Ala	Glu	His	Arg 30	Gly	Met
Leu	Lys	Asp 35	Asn	Ala	Met	Leu	Glu 40	Tyr	Leu	Lys	Ile	Ala 45	Gln	Asp	Leu
Glu	Met 50	Tyr	Gly	Ile	Asn	Tyr 55	Phe	Glu	Ile	Lys	Asn 60	Lys	Lys	Gly	Thr
Asp 65	Leu	Trp	Leu	Gly	Val 70	Asp	Ala	Leu	Gly	Leu 75	Asn	Ile	Tyr	Glu	Lys 80
Asp	Asp	Lys	Leu	Thr 85	Pro	Lys	Ile	Gly	Phe 90	Pro	Trp	Ser	Glu	Ile 95	Arg
Asn	Ile	Ser	Phe 100	Asn	Asp	Lys	Lys	Phe 105	Val	Ile	Lys	Pro	Ile 110	Asp	Lys
Lys	Ala	Pro 115	Asp	Phe	Val	Phe	Tyr 120	Ala	Pro	Arg	Leu	Arg 125	Ile	Asn	Lys
Arg	Ile 130	Leu	Gln	Leu	Cys	Met 135	Gly	Asn	His	Glu	Leu 140	Tyr	Met	Arg	Arg
Arg 145	Lys	Pro	Asp	Thr	Ile 150	Glu	Val	Gln	Gln	Met 155	Lys	Ala	Gln	Ala	Arg 160
Glu	Glu	Lys	His	Gln 165	Lys	Gln	Leu	Glu	Arg 170	Gln	Gln	Leu	Glu	Thr 175	Glu
Lys	Lys	Arg	Arg 180	Glu	Thr	Val	Glu	Arg 185	Glu	Lys	Glu	Gln	Met 190	Met	Arç
Glu	Lys	Glu 195	Glu	Leu	Met	Leu	Arg 200	Leu	Gln	Asp	Tyr	Glu 205	Glu	Lys	Thr
Lys	Lys 210	Ala	Glu	Arg	Glu	Leu 215	Ser	Glu	Gln	Ile	Gln 220	Arg	Ala	Leu	Glr
Leu 225	Glu	Glu	Glu	Arg	Lys 230	Arg	Ala	Gln	Glu	Glu 235	Ala	Glu	Arg	Leu	Glu 240
Ala	Asp	Arg	Met	Ala 245	Ala	Leu	Arg	Ala	Lys 250		Glu	Leu	Glu	Arg 255	Glr
Ala	Val	Asp	Gln	Ile	Lvs	Ser	Gln	Glu	Gln	Leu	Ala	Ala	Glu	Leu	Ala

4293

265 260 Glu Tyr Thr Ala Lys Ile Ala Leu Leu Glu Glu Ala Arg Arg Lys 280 Glu Asp Glu Val Glu Glu Trp Gln His Arg Ala Lys Glu Ala Gln Asp 295 Asp Leu Val Lys Thr Lys Glu Glu Leu His Leu Val Met Thr Ala Pro 310 315 305 Pro Pro Pro Pro Pro Pro Val Tyr Glu Pro Val Ser Tyr His Val Gln 325 330 Glu Ser Leu Gln Asp Glu Gly Ala Glu Pro Thr Gly Tyr Ser Ala Glu 345 Leu Ser Ser Glu Gly Ile Arg Asp Asp Asp Asn Glu Glu Lys Arg Ile 360 Thr Glu Ala Glu Lys Asn Glu Arg Val Gln Arg Gln Leu Xaa Thr Leu 370 375 Ser Ser Glu Leu Ser Gln Ala Arg Asp Glu Asn Lys Arg Thr His Asn 395 390 Asp Ile Ile His Asn Glu Asn Met Arg Gln Gly Arg Asp Lys Tyr Lys 410 Thr Leu Arg Gln Ile Arg Gln Gly Asn Thr Lys Gln Arg Ile Asp Glu 425 430 Phe Glu Ala Leu 435 <210> 4719 <211> 173 <212> PRT <213> Homo sapiens <400> 4719 Leu Gln Val Val Gln Ala Asp Ile Ala Ser Ile Asp Ser Asp Ala Val 5 10 Val His Pro Thr Asn Thr Asp Phe Tyr Ile Gly Gly Glu Val Gly Asn Thr Leu Glu Lys Lys Gly Gly Lys Glu Phe Val Glu Ala Val Leu Glu 45 40 35

4294

Leu Arg Lys Lys Asn Gly Pro Leu Glu Val Ala Gly Ala Ala Val Ser 50 55 60 Ala Gly His Gly Leu Pro Ala Lys Phe Val Ile His Cys Asn Ser Pro 70 75 Val Trp Gly Ala Asp Lys Cys Glu Glu Leu Leu Glu Lys Thr Val Lys 85 Asn Cys Leu Ala Leu Ala Asp Asp Lys Lys Leu Lys Ser Ile Ala Phe 105 Pro Ser Ile Gly Ser Gly Arg Asn Gly Phe Pro Lys Gln Thr Ala Ala 125 120 115 Gln Leu Ile Leu Lys Ala Ile Ser Ser Tyr Phe Val Ser Thr Met Ser 135 140 Ser Ser Ile Lys Thr Val Tyr Phe Val Leu Phe Asp Ser Glu Ser Ile 150 155 160 Gly Ile Tyr Val Gln Glu Met Ala Lys Leu Asp Ala Asn 170 165 <210> 4720 <211> 84 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (65) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (70) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (72) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4720 Arg Gly Asp Pro Phe Pro Leu Val Gly Phe Gly Ser Cys Val Ser Ser 5 10

4295

Leu Cys Lys Thr Leu His Gln Gly Tyr Pro Gly His Glu Gly Val Pro
20 25 30

Pro Val Pro Val Tyr Phe Cys Thr Arg Thr Ser Asn Lys Thr Gly Arg
35 40 45

Cys Leu Gly Asn Cys His Gly Val Arg Glu Arg Asp Ala Phe Tyr Ser 50 55 60

Xaa Gly Val Asp Asp Xaa Thr Xaa Val Ile Asn Cys Ile Cys Trp Glu 65 70 75 80

Lys Val Glu Tyr

<210> 4721

<211> 49

<212> PRT

<213> Homo sapiens

<400> 4721

Arg Gly Gly Cys Ser Glu Pro Arg Ser Arg His Cys Thr Pro Ala 1 5 10 15

Trp Gly Thr Arg Val Arg Leu Ser Leu Lys Lys Lys Lys Lys Glu Lys 20 25 30

Lys Ile Arg Asp Ile Val His Ile Pro Leu Leu Cys Leu His Arg Cys 35 40 45

Pro

<210> 4722

<211> 267

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (88)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (90)

<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<222> (95)
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<221> SITE
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Asn Asn Leu Asn Ser Val Leu Ala Glu Arg Leu Glu Lys Trp Leu Gln
Leu Met Leu Met Trp His Pro Arg Gln Arg Gly Thr Asp Pro Thr Tyr
             20
                                 25
Gly Pro Asn Gly Cys Phe Lys Ala Leu Asp Asp Ile Leu Asn Leu Lys
                             40
Leu Val His Ile Leu Asn Met Val Thr Gly Thr Ile His Thr Tyr Pro
     50
Val Thr Glu Asp Glu Ser Leu Gln Ser Leu Lys Ala Arg Ile Gln Gln
                                          75
 65
                     70
Asp Thr Gly Ile Pro Glu Glu Xaa Gln Xaa Leu Leu Gln Glu Xaa Gly
                                     90
                 85
Leu Ala Leu Ile Pro Asp Lys Pro Ala Thr Gln Cys Ile Ser Asp Gly
                                105
            100
Lys Leu Asn Glu Gly His Thr Leu Asp Met Asp Leu Val Phe Leu Phe
        115
                            120
                                                1.2.5
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4297

Asp Asn Ser Lys Ile Thr Tyr Glu Thr Gln Ile Xaa Pro Arg Pro Gln 135 Pro Glu Ser Val Ser Cys Ile Leu Gln Glu Pro Lys Arg Asn Leu Ala 150 155 Phe Xaa Gln Leu Xaa Lys Val Trp Gly Gln Val Trp Xaa Ser Ile Gln 165 170 Thr Leu Lys Glu Asp Cys Asn Arg Leu Gln Gln Gly Gln Arg Ala Ala 185 Met Met Asn Leu Leu Arg Asn Asn Ser Cys Leu Ser Lys Met Lys Asn 200 Ser Met Ala Ser Met Ser Gln Gln Leu Lys Ala Lys Leu Asp Phe Phe 215 210 Lys Thr Ser Ile Gln Ile Asp Leu Glu Lys Tyr Ser Glu Gln Thr Glu 230 235 Phe Gly Ile Thr Ser Asp Lys Leu Leu Leu Ala Trp Arg Glu Met Glu 245 250 Gln Ala Val Glu Leu Cys Gly Arg Glu Asn Glu 260 <210> 4723 <211> 101 <212> PRT <213> Homo sapiens <400> 4723 His Phe Leu Thr Cys Gly Arg Glu Lys Leu Pro Asn Phe Phe Leu 10 Leu Leu Asn Cys Asn Ile Val Glu Asp Phe Phe Leu Phe Ser Leu 25 Ile Gly Ala Phe Cys Thr Gly Phe Val Cys Val Cys Val Cys Val Cys 35 40 Ala Arg Ala Cys Val Leu Ile Cys Phe Leu Ile His Ser Tyr Pro Leu 50 55

Cys Leu Ser Tyr His Cys Leu Pro Gly Tyr Leu Lys Gln Val His Thr

Phe Glu Lys Lys Lys Cys Cys Leu Lys Asn Val Phe Ser Cys Cys

75

4298

85 90 95

Ser Lys Tyr Phe Ala 100

<210> 4724

<211> 163

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (49)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4724

Arg Ser Pro Asp Ser Ser Gln Val Leu Gly Ala Arg Asp Ala Asp Ser 1 5 10 15

Ser Ser Gly Cys Phe Ser Arg Cys Ser Trp Ala Leu Ala Ser Asp Gly 20 25 30

Ala Leu Arg Gly Cys Phe Pro Gly Ala Arg Phe Cys Ser Thr Thr Ser 35 40 45

Xaa Glu Gly Asn Thr Thr Phe Thr Gly Ser Ala Ala Pro Gly Pro 50 55 60

Ser Ala Ser Arg Gln Gly Pro Lys Pro Gly Pro Pro Ala Ala Thr Val 65 70 75 80

Ala Arg Gln Thr Ser Arg Val Ser Pro Ala Pro Pro Cys Ser Leu Arg 85 90 95

Pro Gly Leu Arg His Glu Ser Ala Pro Ser Gly Ile Gly Asp Val Thr 100 105 110

Ala Arg Gly Ala Leu Arg Gly Leu Gly Cys Thr Val Arg Val Thr Ala 115 120 125

Ala Cys Ala Gly Asn His Gly Cys Ser Gln Met Leu Ala Leu Arg Asn 130 135 140

Ser Lys Trp Glu Thr Ala Ser Arg Arg Gly Val Leu Thr Gly Arg Leu 145 150 155 160

Gly Ile Lys

PCT/US00/26524 WO 01/22920

4299

<210> 4725 <211> 91 <212> PRT <213> Homo sapiens <400> 4725 Glu Ser Leu Trp Ala Phe Cys Leu Ser Leu Leu Glu Arg Leu Ala Cys 15 Cys Ser Leu Leu Tyr Pro Glu Val Cys Leu Trp Asp Phe Ser Pro Val 25 Ala Val Glu Thr Arg Arg Pro Thr Leu Phe Glu Thr Gln Met Leu Leu Ser Leu Ala Ser Pro Ser Leu Ser Ser Pro Asn Glu Pro Thr Phe Cys 55 Thr Ser Thr Arg Met Pro Gly Arg Leu Gly Pro Gln Arg Leu Leu Phe 65 Gln Asn Leu Trp Lys Pro Arg Leu Asn Val Pro 85 <210> 4726 <211> 72 <212> PRT <213> Homo sapiens <400> 4726 Ile Ser Ser His Leu Val Ser Lys Leu Leu Leu Thr Met Val Val Leu Leu Glu Gln Ser Phe Gln Ala Pro Leu Arg Thr Ile Phe Asn Ser Asp 2.5 Thr Lys Gly Lys Thr Gly Cys Tyr Phe Cys Phe Val Val Gln Leu Val 40

Leu Tyr Ser His Met Leu Tyr Ile Leu Asn Ser Pro Val Leu Phe Arg 55 60

50

65

Leu Val Asn Arg Thr Ile Ser Met

4300

<210> 4727 <211> 251 <212> PRT <213> Homo sapiens <400> 4727 Gly Gly Leu Ala Trp Arg Ala Leu Arg Thr Ser Gly Thr Leu Leu Arg Val Glu Arg Leu Leu Glu Asp Tyr Cys Pro Glu Glu Lys Met Phe 25 Gly Phe His Lys Pro Lys Met Tyr Arg Ser Ile Glu Gly Cys Cys Ile 40 Cys Arg Ala Lys Ser Ser Ser Ser Arg Phe Thr Asp Ser Lys Arg Tyr 50 55 Glu Lys Asp Phe Gln Ser Cys Phe Gly Leu His Glu Thr Arg Ser Gly 70 75 Asp Ile Cys Asn Ala Cys Val Leu Leu Val Lys Arg Trp Lys Lys Leu 90 85 Pro Ala Gly Ser Lys Lys Asn Trp Asn His Val Val Asp Ala Arg Ala 100 105 Gly Pro Ser Leu Lys Thr Thr Leu Lys Pro Lys Lys Val Lys Thr Leu 115 120 Ser Gly Asn Arg Ile Lys Ser Asn Gln Ile Ser Lys Leu Gln Lys Glu 130 135 140 Phe Lys Arg His Asn Ser Asp Ala His Ser Thr Thr Ser Ser Ala Ser 150 155 Pro Ala Gln Ser Pro Cys Tyr Ser Asn Gln Ser Asp Asp Gly Ser Asp 165 Thr Glu Met Ala Ser Gly Ser Asn Arg Thr Pro Val Phe Ser Phe Leu 180 185 Asp Leu Thr Tyr Trp Lys Arg Gln Lys Ile Cys Cys Gly Ile Ile Tyr 200 Lys Gly Arg Phe Gly Glu Val Leu Ile Asp Thr His Leu Phe Lys Pro 215 Cys Cys Ser Asn Lys Lys Ala Ala Glu Lys Pro Glu Glu Gln Gly 225 230 235 240

4301

Pro Glu Pro Leu Pro Ile Ser Thr Gln Glu Trp \$245\$

<210> 4728 <211> 45 <212> PRT <213> Homo sapiens <400> 4728 Cys Cys Asp Ala Cys Phe Gln Asp Pro Tyr Gly Val Ala Val Gly Gly 10 Thr Val Gly His Cys Leu Cys Thr Gly Leu Ala Val Ile Gly Gly Arg 25 Met Ile Ala Gln Lys Ile Ser Val Arg Thr Gly Lys Ser <210> 4729 <211> 134 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (101) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (102) <223> Xaa equals any of the naturally occurring L-amino acids <220>

<223> Xaa equals any of the naturally occurring L-amino acids

<221> SITE <222> (103)

Asp Trp Ile Cys Arg Arg Glu Leu Pro Phe Thr Lys Ser Ala His Leu 20 25 30

Thr Asn Pro Trp Asn Glu His Lys Pro Val Lys Ile Gly Arg Asp Gly 35 40 45

4302

Gln Glu Ile Glu Leu Glu Cys Gly Thr Gln Leu Cys Leu Leu Phe Pro 50 55 60

Pro Asp Glu Ser Ile Asp Leu Tyr Gln Val Ile His Lys Met Arg His 65 70 75 80

Lys Arg Arg Met His Ser Gln Pro Arg Ser Arg Gly Arg Pro Ser Arg 85 90 95

Glu Asn Gln Ser Xaa Xaa Glu Gly Val Asp Gln Lys Ile Met Ile 100 105 110

Phe Ile Thr Ala Glu Arg Asn Gln Gly Leu Thr Ile Pro Leu Ser Phe 115 120 125

Thr Arg Asp Gln Gly Ile 130

<210> 4730

<211> 193

<212> PRT

<213> Homo sapiens

<4.00> 4730

Leu Val Pro Pro Lys Ser Trp Thr Ile Gln Val Gly Leu Val Ser Leu
1 5 10 15

Leu Asp Asn Pro Ala Pro Ser His Leu Val Glu Lys Ile Val Tyr His
20 25 30

Ser Lys Tyr Lys Pro Lys Arg Leu Gly Asn Asp Ile Ala Leu Met Lys $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Ala Gly Pro Leu Thr Phe Asn Glu Met Ile Gln Pro Val Cys Leu 50 60

Pro Asn Ser Glu Glu Asn Phe Pro Asp Gly Lys Val Cys Trp Thr Ser 65 70 75 80

Gly Trp Gly Ala Thr Glu Asp Gly Ala Gly Asp Ala Ser Pro Val Leu 85 90 95

Asn His Ala Ala Val Pro Leu Ile Ser Asn Lys Ile Cys Asn His Arg 100 105 110

Asp Val Tyr Gly Gly Ile Ile Ser Pro Ser Met Leu Cys Ala Gly Tyr 115 120 125

4303

Leu Thr Gly Gly Val Asp Ser Cys Gln Gly Asp Ser Gly Gly Pro Leu 130 135 140

Val Cys Gln Glu Arg Arg Leu Trp Lys Leu Val Gly Ala Thr Ser Phe 145 150 155 160

Gly Ile Gly Cys Ala Glu Val Asn Lys Pro Gly Val Tyr Thr Arg Val 165 170 175

Thr Ser Phe Leu Asp Trp Ile His Glu Gln Met Glu Arg Asp Leu Lys
180 185 190

Thr

<210> 4731

<211> 426

<212> PRT

<213> Homo sapiens

<400> 4731

Cys His Arg Gln Arg Arg Cys Leu Leu Pro Ser Asp Cys Glu Lys Thr 1 5 10 15

Ile Thr Gly Pro Arg Asn Cys His Ala Asn Arg Leu Pro Cys Ile Tyr 20 25 30

Leu Val Asp Ser Gly Gly Ala Tyr Leu Pro Arg Gln Ala Asp Val Phe 35 40 45

Pro Asp Arg Asp His Phe Gly Arg Thr Phe Tyr Asn Gln Ala Ile Met 50 55 60

Ser Ser Lys Asn Ile Ala Gln Ile Ala Val Val Met Gly Ser Cys Thr 65 70 75 80

Ala Gly Gly Ala Tyr Val Pro Ala Met Ala Asp Glu Asn Ile Ile Val 85 90 95

Arg Lys Gln Gly Thr Ile Phe Leu Ala Gly Pro Pro Leu Val Lys Ala 100 105 110

Ala Thr Gly Glu Glu Val Ser Ala Glu Asp Leu Gly Gly Ala Asp Leu 115 120 125

His Cys Arg Lys Ser Gly Val Ser Asp His Trp Ala Leu Asp Asp His 130 135

His Ala Leu His Leu Thr Arg Lys Val Val Arg Asn Leu Asn Tyr Gln

145					150					155					160
Lys	Lys	Leu	Asp	Val 165	Thr	Ile	Glu	Pro	Ser 170	Glu	Glu	Pro	Leu	Phe 175	Pro
Ala	Asp	Glu	Leu 180	Tyr	Gly	Ile	Val	Gly 185	Ala	Asn	Leu	Lys	Arg 190	Ser	Phe
Asp	Val	Arg 195	Glu	Val	Ile	Ala	Arg 200	Ile	Val	Asp	Gly	Ser 205	Arg	Phe	Thr
Glu	Phe 210	Lys	Ala	Phe	Tyr	Gly 215	Asp	Thr	Leu	Val	Thr 220	Gly	Phe	Ala	Arg
Ile 225	Phe	Gly	Tyr	Pro	Val 230	Gly	Ile	Val	Gly	Asn 235	Asn	Gly	Val	Leu	Phe 240
Ser	Glu	Ser	Ala	Lys 245	Lys	Gly	Thr	His	Phe 250	Val	Gln	Leu	Cys	Cys 255	Gln
Arg	Asn	Ile	Pro 260	Leu	Leu	Phe	Leu	Gln 265	Asn	Ile	Thr	Gly	Phe 270	Met	Val
Gly	Arg	Glu 275	Tyr	Glu	Ala	Glu	Gly 280	Ile	Ala	Lys	Asp	Gly 285	Ala	Lys	Met
Val	Ala 290	Ala	Val	Ala	Cys	Ala 295	Gln	Val	Pro	Lys	Ile 300	Thr	Leu	Ile	Ile
Gly 305	Gly	Ser	Tyr	Gly	Ala 310	Gly	Asn	Tyr	Gly	Met 315	Суѕ	Gly	Arg	Ala	Tyr 320
Ser	Pro	Arg	Phe	Leu 325	Tyr	Ile	Trp	Pro	Asn 330	Ala	Arg	Ile	Ser	Val 335	Met
Gly	Gly	Glu	Gln 340	Ala	Ala	Asn	Val	Leu 345		Thr	Ile	Thr	Lys 350	Asp	Gln
Arg	Ala	Arg 355	Glu	Gly	Lys	Gln	Phe 360	Ser	Ser	Ala	Asp	Glu 365	Ala	Ala	Leu
Lys	Glu 370	Pro	Ile	Ile	Lys	Lys 375	Phe	Glu	Glu	Glu	Gly 380	Asn	Pro	Tyr	Tyr
Ser 385	Ser	Ala	Arg	Val	Trp 390	Asp	Asp	Gly	Ile	Ile 395	Asp	Pro	Ala	Asp	Thr 400
Arg	Leu	Val	Leu	Gly 405	Leu	Ser	Phe	Ser	Ala 410	Ala	Leu	Asn	Ala	Pro 415	Ile
Glu	Lys	Thr	Asp	Phe	Gly	Ile	Phe	Arg	Met						

4305

420 425

<210> 4732 <211> 651 <212> PRT <213> Homo sapiens <400> 4732 Tyr Phe Thr Asn Glu Thr Asp Asp Ile Ala Asn Leu Glu Ala Ser Val 10 Leu Glu Asn Pro Ser His Val Gln Leu Trp Leu Lys Leu Ala Tyr Lys 20 Tyr Leu Asn Gln Asn Glu Gly Glu Cys Ser Glu Ser Leu Asp Ser Ala Leu Asn Val Leu Ala Arg Ala Leu Glu Asn Asn Lys Asp Asn Pro Glu 55 Ile Trp Cys His Tyr Leu Arg Leu Phe Ser Lys Arg Gly Thr Lys Asp 65 70 75 Glu Val Gln Glu Met Cys Glu Thr Ala Val Glu Tyr Ala Pro Asp Tyr 85 Gln Ser Phe Trp Thr Phe Leu His Leu Glu Ser Thr Phe Glu Glu Lys 105 Asp Tyr Val Cys Glu Arg Met Leu Glu Phe Leu Met Gly Ala Ala Lys 120 125 Gln Glu Thr Ser Asn Ile Leu Ser Phe Gln Leu Leu Glu Ala Leu Leu 130 135 Phe Arg Val Gln Leu His Ile Phe Thr Gly Arg Cys Gln Ser Ala Leu 150 155 145 Ala Ile Leu Gln Asn Ala Leu Lys Ser Ala Asn Asp Gly Ile Val Ala 170 165 Glu Tyr Leu Lys Thr Ser Asp Arg Cys Leu Ala Trp Leu Ala Tyr Ile 180 185 His Leu Ile Glu Phe Asn Ile Leu Pro Ser Lys Phe Tyr Asp Pro Ser 195 200 205 Asn Asp Asn Pro Ser Arg Ile Val Asn Thr Glu Ser Phe Val Met Pro 215 220 210

Trp 225	Gln	Ala	Val	Gln	Asp 230	Val	Lys	Thr	Asn	Pro 235	Asp	Met	Leu	Leu	Ala 240
Val	Phe	Glu	Asp	Ala 245	Val	Lys	Ala	Cys	Thr 250	Asp	Glu	Ser	Leu	Ala 255	Val
Glu	Glu	Arg	Ile 260	Glu	Ala	Cys	Leu	Pro 265	Leu	Tyr	Thr	Asn	Met 270	Ile	Ala
Leu	His	Gln 275	Leu	Leu	Glu	Arg	Tyr 280	Glu	Ala	Ala	Met	Glu 285	Leu	Cys	Lys
Ser	Leu 290	Leu	Glu	Ser	Суѕ	Pro 295	Ile	Asn	Cys	Gln	Leu 300	Leu	Glu	Ala	Leu
Val 305	Ala	Leu	Tyr	Leu	Gln 310	Thr	Asn	Gln	His	Asp 315	Lys	Ala	Arg	Ala	Val 320
Trp	Leu	Thr	Ala	Phe 325	Glu	Lys	Asn	Pro	Gln 330	Asn	Ala	Glu	Val	Phe 335	Tyr
His	Met	Cys	Lys 340	Phe	Phe	Ile	Leu	Gln 345	Asn	Arg	Gly	Asp	Asn 350	Leu	Leu
Pro	Phe	Leu 355	Arg	Lys	Phe	Ile	Ala 360	Ser	Phe	Phe	Lys	Pro 365	Gly	Phe	Glu
Lys	Tyr 370	Asn	Asn	Leu	Asp	Leu 375	Phe	Arg	Tyr	Leu	Leu 380	Asn	Ile	Pro	Gly
Pro 385	Ile	Asp	Ile	Pro	Ser 390	Arg	Leu	Cys	Lys	Gly 395	Asn	Phe	Asp	Asp	Asp 400
Met	Phe	Asn	His	Gln 405	Val	Pro	Tyr	Leu	Trp 410	Leu	Ile	Tyr	Cys	Leu 415	Cys
His	Pro	Leu	Gln 420	Ser	Ser	Ile	Lys	Glu 425	Thr	Val	Glu	Ala	Tyr 430	Glu	Ala
Ala	Leu	Gly 435	Val	Ala	Met	Arg	Cys 440	Asp	Ile	Val	Gln	Lys 445	Ile	Trp	Met
Asp	Tyr 450	Leu	Val	Phe	Ala	Asn 455	Asn	Arg	Ala	Ala	Gly 460	Ser	Arg	Asn	Lys
Val 465	Gln	Glu	Phe	Lys	Phe 470	Phe	Thr	Asp	Leu	Va1 475	Asn	Arg	Cys	Leu	Val 480
Thr	Val	Pro	Ala	Arg 485	Tyr	Pro	Ile	Pro	Phe 490	Ser	Ser	Ala	Asp	Туг 495	Trp

4307

Ser Asn Tyr Glu Phe His Asn Arg Val Ile Phe Phe Tyr Leu Ser Cys 500 505 Val Pro Lys Thr Gln His Ser Lys Thr Leu Glu Arg Phe Cys Ser Val 520 515 Met Pro Ala Asn Ser Gly Leu Ala Leu Arg Leu Leu Gln His Glu Trp 540 535 Glu Glu Ser Asn Val Gln Ile Leu Lys Leu Gln Ala Lys Met Phe Thr 555 550 Tyr Asn Ile Pro Thr Cys Leu Ala Thr Trp Lys Ile Ala Ile Ala Ala 570 565 Glu Ile Val Leu Lys Gly Gln Arg Glu Val His Arg Leu Tyr Gln Arg 585 Ala Leu Gln Lys Leu Pro Leu Cys Ala Ser Leu Trp Lys Asp Gln Leu 600 Leu Phe Glu Ala Ser Glu Gly Gly Lys Thr Asp Asn Leu Arg Lys Leu 610 615 Val Ser Lys Cys Gln Glu Ile Gly Val Ser Leu Asn Glu Leu Leu Asn 625 Leu Asn Ser Asn Lys Thr Glu Ser Lys Asn His 645 650

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<211> 120
<212> PRT
<213> Homo sapiens

<220>
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<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
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<210> 4733

<222> (14)

4308

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4309

<210> 4734 <211> 244 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (232) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4734 Ser Thr Phe Asp Lys Gly Tyr Gly Lys Tyr Phe Ala Ala Gly Glu Lys 10 Tyr His Thr Ser Ser Val Phe His Lys Ala Gln Arg Ala Arg Trp Lys 20 25 Asn Arg Arg Ser Trp Arg Leu Ser Gly Val His Trp Ser Pro Ile Phe 40 35 Cys Arg Ile Ser Ala Leu Lys Val Gly Ala Asp Leu Ser His Val Phe Cys Ala Ser Ala Ala Ala Pro Val Ile Lys Ala Tyr Ser Pro Glu Leu 75 70 Ile Val His Pro Val Leu Asp Ser Pro Asn Ala Val His Glu Val Glu 85 Lys Trp Leu Pro Arg Leu His Ala Leu Val Val Gly Pro Gly Leu Gly 110 100 105 Arg Asp Ala Leu Leu Arg Asn Val Gln Gly Ile Leu Glu Val Ser 120 Lys Ala Arg Asp Ile Pro Val Val Ile Asp Ala Asp Gly Leu Trp Xaa 130 135 140 Val Ala Gln Gln Pro Ala Leu Ile His Gly Tyr Arg Lys Ala Val Leu 145 160 Thr Pro Asn His Val Glu Phe Ser Arg Leu Tyr Asp Ala Val Leu Arg 175 170 165

4310

Gly Pro Met Asp Ser Asp Asp Ser His Gly Ser Val Leu Arg Leu Ser 180 185 190

Gln Ala Leu Gly Asn Val Thr Val Val Gln Lys Gly Glu Arg Asp Ile 195 200 205

Leu Ser Asn Gly Gln Gln Val Leu Val Cys Ser Gln Glu Gly Ser Ser 210 215 220

Ala Gly Val Glu Gly Lys Gly Xaa Ser Cys Arg Ala Pro Trp Ala Ser 225 230 235 240

Trp Tyr Thr Gly

<210> 4735

<211> 107

<212> PRT

<213> Homo sapiens

<400> 4735

Arg Asn Lys Ser Gln Met Gln Arg Tyr Asn Phe His Tyr Leu Lys Tyr 1 5 10 15

Ile Val His Phe Tyr Arg Thr Cys Asp Tyr Ser Arg Met Ile Arg Met 20 25 30

Val Leu Ala Tyr Gly Glu Leu Leu Leu Leu Thr Val Ser Ala Glu Ile 35 40 45

Leu Phe Gln Trp Thr Asn Ile Val Ala Trp Gln Gln Met Pro Thr Phe 50 55 60

Cys Gly Ile Ala Ala Asn Leu Gln Glu Thr Leu Val Gly Phe Ser Phe 65 70 75 80

Cys Phe Leu Cys Phe Phe Pro Leu Leu Leu Asn Gln Gln Gly Trp Lys 85 90 95

Glu Gly Arg Glu Val Met Asn Tyr Ser Phe Gln 100 105

<210> 4736

<211> 78

<212> PRT

<213> Homo sapiens

4311

<400> 4736 Val Val Ser Cys Gly Val Phe Phe Lys Lys Phe Asp Leu Ala Phe Ile 10 Phe Ser Ile Leu Phe Pro Ile Lys Ser Met Gln Ile Ile Cys Pro Lys 25 Leu Ser Ser Ser Asp Ser Ala Phe Val Leu Cys Gln Ser His Phe 40 His Leu Leu Pro Trp Phe His Arg Ser Phe Val Ser Trp Ala Ser Arg 55 Lys Ile Lys Leu Tyr Leu Phe Cys Ile Cys Glu Met Phe Lys 70 75 <210> 4737 <211> 171 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (164) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4737 Gly His Ser Glu Trp Val Ser Cys Val Arg Phe Ser Pro Asn Ser Ser 10 Asn Pro Ile Ile Val Ser Cys Gly Trp Asp Lys Leu Val Lys Val Trp 25 Asn Leu Ala Asn Cys Lys Leu Lys Thr Asn His Ile Gly His Thr Gly 35 45 40 Tyr Leu Asn Thr Val Thr Val Ser Pro Asp Gly Ser Leu Cys Ala Ser 55 Gly Gly Lys Asp Gly Gln Ala Met Leu Trp Asp Leu Asn Glu Gly Lys His Leu Tyr Thr Leu Asp Gly Gly Asp Ile Ile Asn Ala Leu Cys Phe 85 90 Ser Pro Asn Arg Tyr Trp Leu Cys Ala Ala Thr Gly Pro Ser Ile Lys

105

100

4312

Ile Trp Asp Leu Glu Gly Lys Ile Ile Val Asp Glu Leu Lys Gln Glu
115 120 125

Val Ile Ser Thr Ser Ser Lys Ala Glu Pro Pro Gln Cys Thr Ser Leu 130 135 140

Ala Trp Ser Ala Asp Gly Gln Thr Leu Phe Ala Gly Tyr Thr Asp Asn 145 150 155 160

Leu Val Arg Xaa Gly Ser Asp His Trp Thr Arg \$165\$

<210> 4738

<211> 159

<212> PRT

<213> Homo sapiens

<400> 4738

Thr Pro Arg Asp Leu Val Cys Leu Gly Leu Ser Ser Ile Val Gly Val

1 1 5 10 15

Trp Tyr Leu Leu Arg Lys His Trp Ile Ala Asn Asn Leu Phe Gly Leu 20 25 30

Ala Phe Ser Leu Asn Gly Val Glu Leu Leu His Leu Asn Asn Val Ser 35 40 45

Thr Gly Cys Ile Leu Leu Gly Gly Leu Phe Ile Tyr Asp Val Phe Trp 50 55 60

Val Phe Gly Thr Asn Val Met Val Thr Val Ala Lys Ser Phe Glu Ala 65 70 75 80

Pro Ile Lys Leu Val Phe Pro Gln Asp Leu Leu Glu Lys Gly Leu Glu 85 90 95

Ala Asn Asn Phe Ala Met Leu Gly Leu Gly Asp Val Val Ile Pro Gly
100 105 110

Ile Phe Ile Ala Leu Leu Leu Arg Phe Asp Ile Ser Leu Lys Lys Asn 115 120 125

Thr His Thr Tyr Phe Tyr Thr Ser Phe Ala Ala Tyr Ile Phe Gly Leu 130 135 140

Gly Leu Thr Ile Phe Ile Met His Ile Phe Lys His Ala Gln Leu 145 150 155

4313

<210> 4739

<211> 70 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (12) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4739 Tyr Lys Tyr Arg Glu Glu Val Ser Met Asn Leu Xaa Ile Val Leu Ser 10 Asn Pro Leu Glu Cys Gln Ser Leu Lys Asp Phe Ala Leu Leu His Gln 20 Ile Thr Ser Phe Ser Gln Ile Pro Ile Ser Val Ile Thr Gly Ala Asn 40 Leu Lys Val Leu Tyr Ser Phe Thr Thr Leu Gln Ile Cys Asn Ala Ala 55 60 Tyr Asn Ala Glu Glu His 65 <210> 4740 <211> 94 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (3) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4740 Thr Lys Xaa Lys Ser Gly Glu Leu Ala Val Thr Ser Thr Gly Gly His 10 Gly Arg Glu Gly Ser Leu Leu Glu Gly Leu Pro Trp Arg Leu Glu Trp 20 Gly Leu Pro Gly Arg Pro Ala Phe His Pro Cys Leu Pro His Pro Cys 35 40 His Arg Leu Cys Thr Pro Leu Asp Gly Gly Ser Lys Pro Gly Thr Val 55

4314

Pro Val Leu Val Arg Val Ile Ile Met Ile Asn Ile Asn Tyr Asp Ala 65 70 75 80

<210> 4741

<211> 128

<212> PRT

<213> Homo sapiens

<400> 4741

Pro Ser Ser Leu Arg Lys Glu Ser Glu Ser Arg Glu Val Asp Ala Ser 1 5 10 15

Tyr Leu Leu Glu Arg Pro Ser Ser Val Ser Val Val Val Thr Ala Pro 20 25 30

Ser Ala Met Ser Phe Ser Ala Thr Ile Leu Phe Ser Pro Pro Ser Gly 35 40 45

Ser Glu Ala Arg Cys Cys Cys Cys Ala Cys Lys Ser Glu Thr Asn Gly 50 55 60

Gly Asn Thr Gly Ser Gln Gly Gly Asn Pro Pro Pro Ser Thr Pro Ile
65 70 75 80

Thr Val Thr Gly His Gly Leu Ala Val Gln Ser Ser Glu Gln Leu Leu

85

90

95

His Val Ile Tyr Gln Arg Val Asp Lys Ala Val Gly Leu Ala Glu Ala 100 105 110

Ala Leu Gly Leu Ala Arg Ala Asn Asn Glu Leu Leu Lys Arg Leu Gln
115 120 125

<210> 4742

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

4315

<222> (62) <223> Xaa equals any of the naturally occurring L-amino acids Arg Lys Phe Ser Leu Thr His Ser Tyr Gln Ala Ser Ile Ile Gln Ile Pro Lys Pro Ile Ile Asp Thr Thr Thr Thr Thr Thr Thr Thr Thr His 25 His Ala Asn Val Phe Gly Lys His Cys Ala Lys Ile Leu Asn Lys Ile 40 Leu Ala Ser Gln Ile Gln Gln His Ile Lys Lys Phe Ile Xaa Asn Asn 50 55 Gly Val Gly Phe Val Pro Arg Met Gln Gly 65 70 <210> 4743 <211> 149 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (85) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (136) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (145) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4743 Ser Trp Ser Arg Glu Arg Ala Pro Ala Pro Leu Trp Glu Asp Arg Glu 10 Met Pro Val Leu Lys Gln Leu Gly Pro Ala Gln Pro Lys Lys Arg Pro 20 25 Asp Arg Gly Ala Leu Ser Ile Ser Ala Pro Leu Gly Asp Phe Arg His

40

45

4316

Thr Leu His Val Gly Arg Gly Gly Asp Ala Phe Gly Asp Thr Ser Phe 50 60

Leu Ser Arg His Gly Gly Gly Pro Pro Pro Ser Pro Gly Arg Pro Pro 65 70 75 80

Arg Gly Pro Arg Xaa Pro Arg Arg Arg Arg Pro Gln Ser Ala Ala 85 90 95

Pro Arg Leu Arg Pro Ala Val Pro Ser Pro Gly Ser Gly Ala Ser Cys 100 105 110

Trp Thr Arg Cys Trp Arg Met Asp Ala Ala Arg Arg Ser Gly Cys Ala
115 120 125

Ser His Ala Asn Pro Pro Gly Xaa Ala Pro Ala Val Arg His Ala Thr 130 135 140

Xaa Tyr Thr Met Ala 145

<210> 4744

<211> 167

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (162)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (166)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4744

Arg Arg Pro Arg Ser Arg Leu Arg Val Thr Ser Val Ser Asp Gln Asn
1 5 10 15

Asp Arg Val Val Glu Cys Gln Leu Gln Thr His Asn Ser Lys Met Val 20 25 30

Thr Phe Arg Phe Asp Leu Asp Gly Asp Ser Pro Glu Glu Ile Ala Ala 35 40 45

Ala Met Val Tyr Asn Glu Phe Ile Leu Pro Ser Glu Arg Asp Gly Phe 50 55 60

4317

Leu Arg Arg Ile Arg Glu Ile Ile Gln Arg Val Glu Thr Leu Leu Lys 65 70 75 80

Arg Asp Thr Gly Pro Met Glu Ala Ala Glu Asp Thr Leu Ser Pro Gln 85 90 95

Glu Glu Pro Ala Pro Leu Pro Ala Leu Pro Val Pro Leu Pro Asp Pro
100 105 110

Ser Asn Glu Glu Leu Gln Ser Ser Thr Ser Leu Glu His Arg Ser Trp 115 120 125

Thr Ala Phe Ser Thr Ser Phe Ile Leu Ser Ser Trp Glu Leu Leu Cys 130 135 140

Pro Xaa Phe Pro Ile Xaa Phe 165

<210> 4745

<211> 279

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (247)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4745

Ala Gln Asp Gln Trp Ser Glu Leu Phe Met Asp Ala Leu Gly Pro Phe 1 5 10 15

Asn Phe Val Leu Val Ser Ser Val Arg Met Gln Gly Val Ile Leu Leu 20 25 30

Leu Phe Ala Lys Tyr Tyr His Leu Pro Phe Leu Arg Asp Val Gln Thr 35 40 45

Asp Cys Thr Arg Thr Gly Leu Gly Gly Tyr Trp Gly Asn Lys Gly Gly 50 55 60

Val Ser Val Arg Leu Ala Ala Phe Gly His Met Leu Cys Phe Leu Asn 65 70 75 80

Cys His Leu Pro Ala His Met Asp Lys Ala Glu Gln Arg Lys Asp Asn 85 90 95

4318

Arg Ile Glu Ser Tyr Asp Leu His Phe Val Lys Phe Ala Ile Asp Ser 130 135 140

Asp Gln Leu His Gln Leu Trp Glu Lys Asp Gln Leu Asn Met Ala Lys 145 150 155 160

Asn Thr Trp Pro Ile Leu Lys Gly Phe Gln Glu Gly Pro Leu Asn Phe 165 170 175

Ala Pro Thr Phe Lys Phe Asp Val Gly Thr Asn Lys Tyr Asp Thr Ser 180 185 190

Ala Lys Lys Arg Lys Pro Ala Trp Thr Asp Arg Ile Leu Trp Lys Val 195 200 205

Lys Ala Pro Gly Gly Gly Pro Ser Pro Ser Gly Arg Lys Ser His Arg 210 215 220

Leu Gln Val Thr Gln His Ser Tyr Arg Ser His Met Glu Tyr Thr Val 225 230 235 240

Ser Asp His Lys Pro Val Xaa Ala Gln Phe Leu Leu Gln Phe Ala Phe 245 250 255

Gln Gly Arg His Ala Thr Gly Ala Ala Gly Gly Gln Met Ser Gly
260 265 270

Cys Gly Pro Ser Arg Arg Trp 275

<210> 4746

<211> 108

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4746

Pro Met Ala Leu Ala Lys Thr Ala Ile Leu Val Arg Leu Ser Tyr Phe

4319

1 5 10 15

Leu Phe Ile Asp Thr Ser Thr Xaa Thr Ala Phe Leu Ser Ser Val Asp 20 25 30

Leu His Thr His Cys Ser Tyr Gln Leu Met Leu Pro Glu Ala Ile Ala 35 40 45

Ile Val Cys Ser Pro Lys His Lys Asp Thr Gly Ile Phe Arg Leu Thr 50 55 60

Asn Ala Gly Met Leu Glu Val Ser Ala Cys Lys Lys Lys Gly Phe His 65 70 75 80

Pro His Thr Lys Glu Pro Arg Leu Phe Ser Ile Cys Lys His Val Leu 85 90 95

Val Lys Asp Ile Lys Ile Ile Val Leu Asp Leu Arg 100 105

<210> 4747

<211> 84

<212> PRT

<213> Homo sapiens

<400> 4747

Lys Glu Met Val Ile Leu Trp Thr Met Glu Thr Ser Ser Glu Tyr Ala 1 5 10 15

Asp Phe Pro Leu Leu Thr Leu Pro Ser Leu Trp Leu Leu Pro Asp
20 25 30

Lys Gly Gln Gly His Leu Lys Thr Leu Pro Pro Val Gly Phe Gly Val 35 40 45

Thr Gly Ala Ser Ala Cys Ser His Ile Phe Gln Lys Gly Ser Ala Leu 50 55 60

Arg Thr Ser Leu Tyr Leu Gly Phe Leu Ile Pro Leu Ala Val Leu Thr 65 70 75 80

Ser Arg Glu Thr

<210> 4748

<211> 65

<212> PRT

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<213> Homo sapiens
<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4748
Met Phe Lys Leu Tyr Ser Ser Leu Ala Arg Met Xaa Asn Thr Cys Ala
                  5
                                     10
Leu Lys Ala Asn Arg Glu Arg Val His Asn Ile Leu Gln Xaa Leu Lys
             20
                                 25
His Asn Leu Xaa His His Leu Pro Leu Ala Asn Ile Pro Ser Gln Leu
         35
                             40
Phe Ser Arg Glu Glu Pro Phe Lys Leu Trp Ser Ser Ile Tyr Tyr Phe
                         55
His
 65
<210> 4749
<211> 27
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4749
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4321

Arg Asn Ala Lys Val Gly Xaa Gly Val Val Ala His Ala Cys Gly Pro 1 5 10 15

Gly Cys Leu Gly Gly Trp Xaa Gly Arg Ile Ala
20 25

<210> 4750

<211> 118

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (113)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4750

Ser Ser Tyr Ser Lys Ile Ser Leu Arg Asn Ser Ser Lys Val Thr Glu
1 5 10 15

Ser Ala Ser Val Xaa Gln Ser Gln Asp Val Ser Gly Ser Glu Asp Thr
20 25 30

Phe Pro Asn Lys Arg Pro Arg Leu Glu Asp Lys Thr Val Phe Asp Asn 35 40 45

Phe Phe Ile Lys Lys Glu Gln Ile Lys Ser Ser Gly Asn Asp Pro Lys 50 55 60

Tyr Ser Thr Thr Thr Ala Gln Asn Ser Ser Ser Ser Ser Gln Ser 65 70 75 80

Lys Met Val Asn Cys Pro Val Cys Gln Asn Glu Val Leu Glu Ser Gln 85 90 95

Ile Asn Glu His Leu Asp Trp Cys Leu Glu Gly Asp Ser Ile Lys Val 100 105 110

Xaa Ser Glu Glu Ser Leu 115

4322

<211> 172 <212> PRT <213> Homo sapiens <220> <221> SITE <222> (55) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (116) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4751 Pro Thr Arg Pro Pro Gln Ala Asn Arg Gly Val Val Arg Trp Glu Tyr 5 15 Phe Arg Leu Arg Pro Leu Arg Phe Arg Ala Pro Ala Leu Arg Leu Gln Lys Ser Gln Ser Ser Asp Leu Leu Glu Arg Glu Arg Glu Ser Val Leu 40 Arg Arg Glu Glu Val Xaa Glu Glu Arg Arg Asn Ala Leu Phe Pro 55 Glu Val Phe Ser Pro Thr Pro Asp Glu Asn Ser Asp Gln Asn Ser Arg 65 70 Ser Ser Ser Gln Ala Ser Gly Ile Thr Gly Ser Tyr Ser Val Ser Glu 90 Ser Pro Phe Phe Ser Pro Ile His Leu His Ser Asn Val Ala Trp Thr 100 105 Val Glu Asp Xaa Val Asp Ser Ala Pro Pro Gly Gln Arg Lys Lys Glu 115 120 Gln Trp Tyr Ala Gly Ile Asn Pro Ser Asp Gly Ile Asn Ser Glu Val 135 Leu Glu Ala Ile Arg Val Thr Arg His Lys Asn Ala Met Ala Glu Arg 150 155 Trp Glu Ser Arg Ile Tyr Ala Ser Glu Glu Asp Asp 165 170

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<211> 119
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (95)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids
<400> 4752
Glu Trp Glu Cys Trp Leu Leu Gln Tyr Trp Ser Leu Tyr Thr Val
                  5
                                     10
                                                          15
Leu His Thr Arg Phe Phe Ser Gly Tyr Met Ser Phe Leu Ser Lys Leu
             20
                                 25
Cys Gly Ser His Glu Glu Thr Ser Asn Gln Gly Lys Gly Glu Gly Leu
Arg His Lys Thr Tyr Leu Tyr Lys Ile Ser Phe Lys Asn Ser Asn Leu
                        55
Gly His Val Lys Phe Phe Tyr Ile Phe Ser Cys Leu Asn Leu Ser Ser
 65
                     70
                                         75
Phe Phe Met Leu Cys Ser Ala Arg Lys Cys Gly Glu Met Asp Xaa Gly
                                     90
Gly Cys Gly Xaa Asp Arg Trp Leu Gly Ser Thr Cys Leu Cys Leu Phe
                                105
                                                     110
Pro Phe Met Cys Ser Cys Val
        115
<210> 4753
<211> 193
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids
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4324

<400> 4753

Xaa Gly Arg Ala Trp Val Met Ala Ala Pro Gly Ala Leu Leu Val Met
1 5 10 15

Gly Val Ser Gly Ser Gly Lys Ser Thr Val Gly Ala Leu Leu Ala Ser 20 25 30

Glu Leu Gly Trp Lys Phe Tyr Asp Ala Asp Asp Tyr His Pro Glu Glu
35 40 45

Asn Arg Arg Lys Met Gly Lys Gly Ile Pro Leu Asn Asp Gln Asp Arg 50 55 60

Ile Pro Trp Leu Cys Asn Leu His Asp Ile Leu Leu Arg Asp Val Ala
65 70 75 80

Ser Gly Gln Arg Val Val Leu Ala Cys Ser Ala Leu Lys Lys Thr Tyr 85 90 95

Arg Asp Ile Leu Thr Gln Gly Lys Asp Gly Val Ala Leu Lys Cys Glu 100 105 110

Glu Ser Gly Lys Glu Ala Lys Gln Ala Glu Met Gln Leu Leu Val Val
115 120 125

His Leu Ser Gly Ser Phe Glu Val Ile Ser Gly Arg Leu Leu Lys Arg 130 135 140

Leu Glu Pro Pro Ala Ala Pro Glu Asn Phe Ile Gln Ile Ser Val Asp 165 170 175

Lys Asn Val Ser Glu Ile Ile Ala Thr Ile Met Glu Thr Leu Lys Met 180 185 190

Lys

<210> 4754

<211> 194

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (182)

<223> Xaa equals any of the naturally occurring L-amino acids

4325

<400> 4754

Gln Asp His Gly Ala Trp Leu Arg Gly Gly Asp Val Trp Leu Asp Ser 1 5 10 15

Cys Arg Phe Ala Asp Asn Gly Ile Gly Leu Thr Leu Ala Ser Gly Gly
20 25 30

Thr Phe Pro Tyr Asp Asp Gly Ser Lys Gln Glu Ile Lys Asn Ser Leu 35 40 45

Phe Val Gly Glu Ser Gly Asn Val Gly Thr Glu Met Met Asp Asn Arg 50 55 60

Ile Trp Gly Pro Gly Gly Leu Asp His Ser Gly Arg Thr Leu Pro Ile 65 70 75 80

Gly Gln Asn Phe Pro Ile Arg Gly Ile Gln Leu Tyr Asp Gly Pro Ile 85 90 95

Asn Ile Gln Asn Cys Thr Phe Arg Lys Phe Val Ala Leu Glu Gly Arg 100 105 110

His Thr Ser Ala Leu Ala Phe Arg Leu Asn Asn Ala Trp Gln Ser Cys
115 120 125

Pro His Asn Asn Val Thr Gly Ile Ala Phe Glu Asp Val Pro Ile Thr 130 135 140

Ser Arg Val Phe Phe Gly Glu Pro Gly Pro Trp Phe Asn Gln Leu Asp 145 150 155 160

Met Asp Gly Asp Lys Thr Ser Val Phe His Asp Val Asp Gly Ser Val 165 170 175

Ser Glu Tyr Pro Gly Xaa Tyr Leu Arg Arg Met Thr Thr Gly Trp Ser 180 185 190

Gly Thr

<210> 4755

<211> 500

<212> PRT

<213> Homo sapiens

<400> 4755

Ile Arg His Glu Lys Asp Arg Gly Pro Arg Arg Ser Val Ser Phe Pro
1 5 10 15

Arg	Ala	Leu	Ser 20	Gly	Asn	Met	Ala	Gly 25	Val	Glu	Glu	Val	Ala 30	Ala	Ser
Gly	Ser	His 35	Leu	Asn	Gly	Asp	Leu 40	Asp	Pro	Asp	Asp	Arg 45	Glu	Glu	Gly
Ala	Ala 50	Ser	Thr	Ala	Glu	G1u 55	Ala	Ala	Lys	Lys	Lys 60	Arg	Arg	Lys	Lys
Lys 65	Lys	Ser	Lys	Gly	Pro 70	Ser	Ala	Ala	Gly	Glu 75	Gln	Glu	Pro	Asp	Lys 80
Glu	Ser	Gly	Ala	Ser 85	Val	Asp	Glu	Val	Ala 90	Arg	Gln	Leu	Glu	Arg 95	Ser
Ala	Leu	Glu	Asp 100	Lys	Glu	Arg	Asp	Glu 105	Asp	Asp	Glu	Asp	Gly 110	Asp	Gly
Asp	Gly	Asp 115	Gly	Ala	Thr	Gly	Lys 120	Lys	Lys	Lys	Lys	Lys 125	Lys	Lys	Lys
Arg	Gly 130	Pro	Lys	Val	Gln	Thr 135	Asp	Pro	Pro	Ser	Val 140	Pro	Ile	Cys	Asp
Leu 145	Tyr	Pro	Asn	Gly	Val 150	Phe	Pro	Lys	Gly	Gln 155	Glu	Cys	Glu	Tyr	Pro 160
Pro	Thr	Gln	Asp	Gly 165	Arg	Thr	Ala	Ala	Trp 170	Arg	Thr	Thr	Ser	Glu 175	Glu
Lys	Lys	Ala	Leu 180	Asp	Gln	Ala	Ser	Glu 185	Glu	Ile	Trp	Asn	Asp 190	Phe	Arg
Glu	Ala	Ala 195	Glu	Ala	His	Arg	Gln 200	Val	Arg	Lys	Tyr	Val 205	Met	Ser	Trp
Ile	Lys 210	Pro	Gly	Met	Thr	Met 215	Ile	Glu	Ile	Cys	Glu 220	Lys	Leu	Glu	Asp
Cys 225	Ser	Arg	Lys	Leu	Ile 230	Lys	Glu	Asn	Gly	Leu 235	Asn	Ala	Gly	Leu	Ala 240
Phe	Pro	Thr	Gly	Cys 245	Ser	Leu	Asn	Asn	Cys 250	Ala	Ala	His	Tyr	Thr 255	Pro
Asn	Ala	Gly	Asp 260	Thr	Thr	Val	Leu	Gln 265	Tyr	Asp	Asp	Ile	Cys 270	Lys	Ile
Asp	Phe	Gly 275	Thr	His	Ile	Ser	Gly 280	Arg	Ile	Ile	Asp	Суs 285	Ala	Phe	Thr

4327

Val Thr Phe Asn Pro Lys Tyr Asp Thr Leu Leu Lys Ala Val Lys Asp 295 290 Ala Thr Asn Thr Gly Ile Lys Cys Ala Gly Ile Asp Val Arg Leu Cys 310 315 Asp Val Gly Glu Ala Ile Gln Glu Val Met Glu Ser Tyr Glu Val Glu 330 325 Ile Asp Gly Lys Thr Tyr Gln Val Lys Pro Ile Arg Asn Leu Asn Gly 345 340 His Ser Ile Gly Gln Tyr Arg Ile His Ala Gly Lys Thr Val Pro Ile 360 Val Lys Gly Glu Ala Thr Arg Met Glu Glu Gly Glu Val Tyr Ala 380 375 Ile Glu Thr Phe Gly Ser Thr Gly Lys Gly Val Val His Asp Asp Met 390 395 Glu Cys Ser His Tyr Met Lys Asn Phe Asp Val Gly His Val Pro Ile 405 410 Arg Leu Pro Arg Thr Lys His Leu Leu Asn Val Ile Asn Glu Asn Phe 420 425 Gly Thr Leu Ala Phe Cys Arg Arg Trp Leu Asp Arg Leu Gly Glu Ser 440 Lys Tyr Leu Met Ala Leu Lys Asn Leu Cys Asp Leu Gly Ile Val Asp 455 Pro Tyr Pro Pro Leu Cys Asp Ile Lys Gly Ser Tyr Thr Ala Gln Phe 465 470 475 Glu His Thr Ile Leu Leu Arg Pro Thr Cys Lys Glu Val Val Ser Arg 490 495 485 Gly Asp Asp Tyr

<210> 4756

<211> 76

<212> PRT

<213> Homo sapiens

500

<400> 4756

4328

Ala Leu Ala Ile Ala Glu Lys Ser Gln Glu Phe Leu Glu Ala Asp Asn 1 5 10 15

Arg Gln Leu Pro Asn Gly Val Tyr Thr Thr Ala Glu Gln Arg Pro Asn 20 25 30

Ala Tyr Ile Pro Glu Ala Asp Ala Thr Leu Pro Leu Pro Lys Pro Tyr 35 40 45

Gly Ala Leu Ala Pro Phe Lys Pro Ser Glu Pro Gly Ala Asn Met Arg 50 55 60

His Ile Arg Lys Pro Val Ile Lys Pro Val Glu Ile 65 70 75

<210> 4757

<211> 113

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (65)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 4757

Met Ala Tyr Thr Ile Pro Val Ile Ile Val Gly Gly Cys Trp Phe Ala 1 5 10 15

Trp Arg His Gln Ser Ser Asp Glu Xaa Ile Asp Tyr Phe Ala Val Ser 20 25 30

Leu Arg Ile Ile Gly Val Leu Ala Leu Ile Leu Thr Ser Cys Gly Leu 35 40 45

4329

Ala Ala Ile Asn Ala Asp Xaa Ile Trp Tyr Phe Ala Ser Gly Gly Val
50 55 60

Xaa Gly Ser Leu Leu Ser Thr Xaa Leu Gln Pro Leu Leu His Ser Ser 65 70 75 80

Gly Gly Thr Ile Ala Leu Leu Cys Val Trp Ala Ala Gly Leu Thr Leu 85 90 95

Phe Thr Gly Trp Ser Trp Val Thr Leu Leu Lys Asn Ser Ala Ala Gly
100 105 110

Phe

<210> 4758

<211> 111

<212> PRT

<213> Homo sapiens

<400> 4758

Thr Ile Cys Val Val Arg Gly Ala Thr Ala Ile Ser Ala Glu Leu Gly
1 5 10 15

Gly Ile Ser Thr Thr Phe Leu Ser Ala Glu Ala Phe Pro Pro Thr Leu 20 25 30

Met Leu Phe Asn Ser Val Leu Arg Gln Pro Gln Leu Gly Val Leu Arg
35 40 45

Asn Gly Trp Ser Ser Gln Tyr Pro Leu Gln Ser Leu Leu Thr Gly Tyr 50 55 60

Gln Cys Ser Gly Asn Asp Glu His Thr Ser Tyr Gly Glu Thr Gly Val 65 70 75 80

Pro Val Pro Pro Phe Gly Cys Thr Phe Ser Ser Ala Pro Asn Met Glu 85 90 95

His Val Leu Ala Val Ala Asn Glu Glu Gly Phe Cys Ser Ile Val 100 105 110

<210> 4759

<211> 157

<212> PRT

<213> Homo sapiens

4330

<220> <221> SITE <222> (117) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (133) <223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (144) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4759 Ala Gly Glu Arg Asp Gln Gly Arg Arg Gly Glu Ser Arg Glu Gly 5 Trp Ser Phe Gly Glu Ser Leu Trp Lys Met Ala Pro Val Val Thr Gly 25 Lys Phe Gly Glu Arg Pro Pro Pro Lys Arg Leu Thr Arg Glu Ala Met 40 Arg Asn Tyr Leu Lys Glu Arg Gly Asp Gln Thr Val Leu Ile Leu His 55 Ala Lys Val Ala Gln Lys Ser Tyr Gly Asn Glu Lys Arg Phe Phe Cys 70 65 Pro Pro Pro Cys Val Tyr Leu Met Gly Ser Gly Trp Lys Lys Lys Lys 90 Glu Gln Met Glu Arg Asp Gly Cys Ser Glu Gln Glu Ser Gln Pro Cys 105 Ala Phe Ile Gly Xaa Gly Asn Ser Asp Gln Glu Met Gln Gln Leu Asn 120 Leu Gly Arg Lys Xaa Leu Leu His Ser Gln Thr Leu Tyr Ile Ser Xaa 130 135 140 Ser Ala Ser Glu Asp Phe His Val Val Cys Lys Val Phe 145 150 155

<210> 4760

<211> 60

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<212> PRT
<213> Homo sapiens
<400> 4760
Leu Arg Met Cys Glu Lys Leu Thr Glu Pro Asp Ala Cys Cys Tyr Phe
                                     10
Thr Ala Met Ser Leu Phe Leu Ser Thr Leu Lys Ile Phe Phe Leu Phe
                                 25
             2.0
Asn Val Val Tyr Phe Gly Leu Arg Asn Asn Cys Ser Val Glu Asn Asn
                             40
Pro Leu Ser Glu Lys Lys Val Ala Thr Thr Ser Phe
                         55
<210> 4761
<211> 460
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (303)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (305)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (436)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (442)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (444)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (447)
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4332

<223> Xaa equals any of the naturally occurring L-amino acids <220> <221> SITE <222> (448) <223> Xaa equals any of the naturally occurring L-amino acids <400> 4761 Leu Asp Ala Pro Leu Asp Thr Phe Asn Gly Asn Arg Phe Ala Leu Arg 5 Leu Thr Ala Ile Phe Leu Gln Pro Leu Gly Lys Leu Val Val Arg Ala 25 Leu His Gly Pro Trp Asn Thr Asp Ser Pro Asp Asn Leu Glu Glu Val 40 Lys Phe Leu Leu His Met Trp Val Ala Leu Phe Tyr Ser Asn Gln Asn 55 Lys Ile Ile Arg Ser Ser Arg Lys Val Val Glu His Ser Asn Pro Ala 65 70 Lys Tyr Val Ser Ile Asn Ser Thr Leu Glu Ser Cys Glu Leu Arg Glu 85 90 Ile Glu Glu Ser Leu Gly Leu Glu Lys Cys Ser Ala Asp Ser Leu Leu 105 Glu Thr Asn Glu Ile Ser Arg Ala His Ala Ala Glu Val Ser Phe Arg 115 120 125 Asp Pro Asn Cys Leu Pro Phe Ile Lys Thr Pro Leu Thr Gln Gly 135 Leu Glu Leu Cys Val Gln Asn Glu Gln Lys Lys Thr Phe Ala Arg Glu 150 155 Cys Asp Pro Asp Thr Gln Glu Asp Gln Asn Phe Ile Cys Ser Tyr Asn 165 170 Asn Glu Val Thr Gly Glu Glu Ala Lys Gln Glu Ser Leu Glu Thr Ser 180 185 190 Asn Leu Val Leu Ser Gly Ile Gly Ser Thr Gln Thr Asn Gly Pro Ser 200 205 195 Val Pro Ser Glu Glu Glu Ile Val Gln Pro Leu Asp Ser Thr Arg Val 215 220 Ala Ser Tyr Ser Gly Thr Val Thr Gln Ala Thr Phe Thr Arg Thr Tyr

4333

230 235 225 Asp Gly Pro Gly Ser Gln Pro Val Ile Cys Gln Ser Ser Val Tyr Gly 245 250 Thr Leu Glu Asn Lys Val Asp Ile Leu Asp Ala Ala Val Gln Thr Lys 265 Thr Gly Thr Leu Gln Asp Leu Ile Gln His Gly Ser Pro Ile Asn Asn 280 275 Glu Cys His Pro Ser Leu Glu Arg Lys Asp Asp Asn Met Gly Xaa Ala 295 Xaa Ile Asn Pro Glu Pro Ile Thr Leu Thr Phe Glu Lys Asn Ala His 310 315 Val Pro Ile Gln Thr Glu Gly Val Asn Thr Ala Asp Glu Pro Thr Thr 325 330 Phe Lys Lys Glu Leu Ile Lys Gln Val Ser Pro Ala Ala Ser Leu Arg 340 345 His Pro Val Ser Thr Ser Glu Asn Ala Arg Thr Gln Gly Leu Arg Asp 360 Ile Pro Ser Leu Val Val Ala Gly Gln Lys Gly Thr Lys Tyr Leu Cys 375 380 Ala Ser Ser Val Gly Gly Glu Thr Leu Asp Lys Ala Val Cys Ser Leu 385 390 395 Gln Lys Glu Thr Pro Leu Pro Val Ser Leu Pro Ser Asp Lys Thr Met 405 410 Val Met Glu Ala Leu Ser Leu Ala Lys Ser Ser His Leu Ser Pro 425 Ser Glu Glu Xaa Arg Cys Thr Gln Asp Xaa Leu Xaa Gln Thr Xaa Xaa 440 Leu Leu Gly Leu Ser Leu Glu Arg Leu Leu Arg Thr 450 455 460

<210> 4762

<211> 72

<212> PRT

<213> Homo sapiens

4334

Lys Gly Val Gly Arg Phe Arg Met Val Gly Gly Thr Glu Val Pro Glu 35 40 45

Val Lys Arg Pro Leu Val Leu Thr Gly Leu Thr Arg Ala Trp Thr Leu 50 55 60

Gly Ala Val Leu Cys Glu Leu Ala 65 70

<210> 4763

<211> 135

<212> PRT

<213> Homo sapiens

<400> 4763

Trp Glu Pro Thr Phe Phe Gly Phe Ser Gly Glu His Asn Ser Lys His
1 5 10 15

Pro Leu Gly Ser His Met Tyr Arg Asn Gly Thr Gln Leu Gly His Ser 20 25 30

His Gly Leu Pro Arg Pro Gly Met Cys Gly Ala Lys Trp Gly Gln Gly 35 40 45

Pro Asp Pro Arg Gly Glu Gly Pro Gln Thr Pro Arg Asp Val Ser 50 55 60

Ile Pro Arg Pro Ala Phe Trp Arg His Leu Pro Gly Ala Val Leu Ser
65 70 75 80

Gln Gln Ala Trp Gly Glu Ser Leu Val Tyr Ala Gly Asn Arg Val Gln 85 90 95

Gly Pro Ser Val Pro Pro Ser Ala Leu Thr Trp Ala Met His Pro Leu
100 105 110

Ser Pro Lys His Lys Gln Ala Leu Leu Gln Tyr Gly Ala Arg Thr Gly
115 120 125

Val Pro Ser Val Leu Trp Leu 130 135

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<210> 4764
<211> 106
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids
His Lys Cys Phe Gln Cys Phe Ile Leu Ala Asn Gly Phe Leu Lys Val
Ile Lys Pro Phe Gln Arg Asn Trp Ser Asp Lys Thr Phe Phe Leu Val
                                 25
Cys Leu Asn Lys Ala Ile Ser Glu Ala Leu Leu Ser Lys Met Thr Phe
                             40
Leu Ser Phe Phe Lys Thr Asn Leu Leu Leu Glu Thr Phe Cys Thr
     50
                         55
Ile Lys Gln Ser Arg Arg Leu Lys Lys Lys Lys Lys Lys Lys Lys Lys
Lys Arg Ala Ala Ala Leu Glu Asp Pro Ser Leu Arg Thr Arg Ala Cys
                 85
                                     90
Asp Val Ile Ala Leu Leu Leu Arg Xaa Pro
            100
<210> 4765
<211> 287
<212> PRT
<213> Homo sapiens
<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids
<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids
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